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ABSTRACT

This volume features the reform journeys of six American high schools. The six high schools portrayed here include four large comprehensive high schools (Oakland Technical High in Oakland, California, and Brighton High in Boston, Massachusetts, are urban; Sir Francis Drake in Marin County, California, and Rex Putnam in North Clackamas, Oregon, are suburban), as well as two small schools, one urban and one suburban, started within the past decade (Landmark in New York City and Quest in a suburb of Houston, Texas). The story of each school is framed by a common set of essential questions: (1) who or what creates the impetus for reinventing an existing high school or inventing a new one; (2) how, and under what circumstances, external resources, pressures, or supports act as a stimulus or a deterrent to reform; (3) what is the role of the school district in promoting reform in its high schools; (4) why and how those leading the change create a vision and set of strategies; (5) how a school develops and maintains the traction for continuous improvement; (6) what major obstacles and barriers a school faces in reinventing or inventing itself; and (7) how

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schools keep a focus on equity, especially as new dilemmas emerge, e.g., in the balancing of choice and equity. (YLB)

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Reinventing High School: Six Journeys of Change

An in-depth look at six high schools that are transforming the way we think about secondary schooling

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Jobs for the Future, a national nonprofit organization, advances the skills and knowledge required for success in the New Economy. JFF identifies, analyzes, refines, and advocates for innovative educational and workforce development strategies that expand economic opportunity. As part of that mission, JFF seeks to strengthen the connections between work and learning.

The **Coalition of Essential Schools** is a growing national network comprised of over 1,000 schools and 24 regional support centers, that increases student achievement by supporting the rethinking of priorities and the redesign of curriculum, instruction, and assessment. CES National supports the work of regional centers that coach schools through systematic change at the school site.

The **New American High Schools** initiative of the U.S. Department of Education supports high school reform by identifying public schools nationwide that have dramatically improved the way they educate their students, conducting research and evaluation to determine how these high schools achieve outstanding results, and helping to create public policies that will support high school reform efforts.

The **Northeast and Islands Regional Educational Laboratory at Brown University**, one of ten federally supported educational laboratories in the United States, seeks to improve teaching and learning, advance school improvement, build capacity for reform, and develop strategic alliances with key members of the region's education and policymaking community.

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As always, the views expressed are those of the authors. Any errors are solely our responsibility.

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Reinventing High School: Six Journeys of Change

By Adria Steinberg

A long hallway lined with lockers... a crowded stairwell crammed with teenagers... an adult gesturing with a piece of chalk.... It takes only one or two such images to evoke the sights, sounds, and smells of the American high school.

The major features and dynamics of most high schools today are entirely recognizable to those who attended high school 30 or more years ago. The iconography of high school is a common reference point not only across generations but also social classes and races. It is little wonder that a tepid air of inevitability permeates our collective concept of high school.

In the face of such seeming immutability, it is difficult to remember that the high school is, in fact, a social construction as much as a material one, fashioned to address the needs of a particular society in a particular historical moment. While the high school might seem impervious to change, under the surface very important shifts have taken place—in the demographics of who enrolls and who graduates, in the assumptions about how many young people will need postsecondary education, in what we know about the human brain and the nature of understanding, and in the expanded opportunities for learning presented by new technologies.

In many schools and communities, the fault lines caused by these shifts still remain buried far below the surface. Schools continue to go about business as usual, perhaps attempting to add new wings or stories to edifices that, people assume, are on solid ground. In other places, though, knowledge of the fault lines has impelled a different level and kind of activity: by retrofitting large comprehensive high schools or creating new small schools, people are working hard to accommodate and even anticipate the dramatic shifting of terrain.

Before, After, and Everything In Between

Although the recent history of American school reform encompasses several decades of such activity, we know surprisingly little about it. How does a long-standing, comprehensive high school develop the traction to initiate a change process and then sustain this momentum? What does it take to transform the ideas of a small group of visionary people into a vibrant new educational community that can change and grow as it takes in new students, parents, and teachers? And how do these efforts differ in urban and suburban communities?

Reinventing High School features the reform journeys of six American high schools. The stories describe many promising and effective practices, yet the intent is not to create a "best practices" compendium or to put a few schools in the limelight. In this 15-minutes-of-fame culture, it is too easy to be seduced by beautiful snapshots that show "after" without "before" and leave out everything that came between or happens to fall outside of the carefully framed, zoom-lens close-up.

Underlying this volume are two strongly held beliefs: all schools are works-in-progress; and the work involved in school reform cannot take place only in the school building itself. To understand what is involved in reinventing or inventing a school, the authors necessarily look at improvement efforts over extended periods of time, and they look beyond the walls of the school to the local and state context for reform.[1]

Indeed, a revealing exercise to do with a group of teachers and administrators charged with leading a high school change process is to ask them to produce a "journey map" tracing the recent history of the school. What have been the key events, milestones, changes and barriers to change, influences, supports, and pressures of the last decade or more? How have external and internal pressures interacted to propel the school forward or keep it the same? A journey map is a visual or graphic depiction of the answers to such questions.

People inside a school express surprise that anyone would ask such questions. They have come to expect a different set of questions, more focused on how and when they will implement particular reforms or carry out new mandates or achieve better test results. Yet there is, in fact, a great deal to be learned from each school's journey—both by those inside and outside of the school itself. We are grateful to the schools portrayed here for opening themselves up to scrutiny and allowing their stories, in all of their complexities, to inform the work of others.

Selecting Schools to Study

The idea for this volume came out of a brainstorming meeting on high school reform convened by Jobs for the Future and the Coalition of Essential Schools. For the past seven years, Jobs for the Future has worked with school districts and communities across the country on issues of high school reform and youth transitions to college and careers. Its efforts in this area currently focus on a dozen communities that are building connected learning systems, linking redesigned high schools with learning opportunities in the community. Established by Theodore Sizer nearly two decades ago, the Coalition of Essential Schools is a national network of schools and regional centers engaged in redesigning schools, using a set of common principles that emphasize inquiry, active learning, and personalization.

[1] The case studies and their authors are: Lili Allen, Brighton; Cheryl Almeida, North Clackamas School District/Rex Putnam; Kathleen Cushman, Landmark and Quest; Larry DeSalvatore, Sir Francis Drake; and Tom Malarky, Oakland Technical. Adria Steinberg wrote the opening essay, "Reinventing High School," and served, with Larry DeSalvatore, as Developmental Editor.

Joined by common concerns about what students know and can do when they leave high school—what, in other words, high school graduates carry with them as they make the transition to college and careers—the two organizations have collaborated on a number of projects. As part of a proposal to the New American High Schools Initiative of the United States Department of Education, the organizations committed to portraying not only the process but also the results of reform in six high schools within our respective networks.

What we proposed was to look at these schools through a wide-angle lens, one that would take in not just the school itself also but its interaction with other institutions, leaders, and social and political forces in the community, state, and country. The expectation was that this type of case study would prove useful to the growing number of people who support education reform both inside and outside of the high school.

Because we wanted to look at change over time, our first and primary selection criterion was that a school be at least five years into the process of invention or reinvention. Related to that was a requirement that the change effort involve a substantial proportion of the school community in some way . Our third major criterion was that the school's definition of learning encompass the kinds of experiences and opportunities teenagers have in community and workplace settings, when adults mentor them and prod them to meet real-world standards of accomplishment. Finally, the selection process was informed by our desire to include a mix of urban and suburban, and large and small schools.

A Reader's Guide to the Case Studies

The six high schools portrayed here include four large comprehensive high schools (Oakland Technical High in Oakland, CA, and Brighton High in Boston, MA, are urban; Sir Francis Drake in Marin County, CA, and Rex Putnam in North Clackamas, OR, are suburban), as well as two small schools, one urban and one suburban, started within the past decade (Landmark in New York City and Quest in a suburb of Houston, TX). To frame the investigations, we established a common set of essential questions. These are offered here so they can also guide the reader and perhaps even become the basis for study groups or conversations as other high school communities undertake the difficult and important work of reform.

- Who or what creates the impetus for reinventing an existing high school or inventing a new one?
- How, and under what conditions, do external resources, pressures, or supports act as a stimulus or a deterrent to reform?
- What is the role of the school district in promoting reform in its high schools?
- Why and how do those leading the change create a vision and set of strategies?
- How does a school develop and maintain the traction for continuous improvement?
- What are the major obstacles and barriers a school faces in reinventing or inventing itself?
- How do schools keep a focus on equity, especially as new dilemmas emerge, e.g., in the balancing of choice and equity?

Each school offers up its own particular answers to these questions, as the thumbnail sketches below reveal.

Oakland Technical High School

The change journey for Oakland Technical High School began fifteen years ago when a group of CEO's from local hospitals, hoping to diversify their workforce, helped a reform-minded principal and an English teacher create a small, half-day health careers academy; a physics teacher and a drafting teacher soon emulated this model to create an engineering academy. In subsequent years, the district, as well as the school, has used career academies as a vehicle for reform. In addition, data-based inquiry and action research have helped to shape the school's approach to whole school reform. A large, urban high school, Oakland Tech has become recognized for its various small learning communities and has seen college attendance and AP scores increase significantly.

Yet despite such promising results, the school's reform efforts continue to face formidable challenges: student outcomes are better in the two original academies than in the four that have formed since; high percentages of ninth graders dropout before ever making it into an academy program; and roughly half of the school's students (including a disproportionate number of African-American and Latino students) are not in any academy. The school is working with the district and a variety of partners (including the Coalition of Essential Schools, Jobs for the Future, and the Bay Area School Reform Collaborative, which is the local Annenberg Challenge affiliate) to achieve greater equity and to move from model programs to whole school change.

Brighton High School

Across the country, Brighton High School in Boston also traces its reform history back to the early 1980s, when the district and a local business partnership (the Boston Private Industry Council) formed the Boston Compact, a unique agreement to join work-based with school-based learning opportunities for young people. Brighton High created one of the first career pathway programs in the system and has served as a learning laboratory and lead school in Boston's high school reform efforts ever since.

As in Oakland, Brighton High and its community and district partners (these include the Boston Private Industry Council, Jobs for the Future, and the Boston Plan for Excellence, which is the local Annenberg Challenge affiliate) are working hard to understand and mitigate the differential impacts of reform on various sub-populations of students, especially, in this case, students with limited English proficiency. Two years into a faculty-approved plan to reorganize the tenth through twelfth grades entirely into career pathways, the school is struggling to resolve scheduling and staffing dilemmas created by this plan. As in Oakland, the challenge is to go from small successful programs to school-wide improvement and gains in student outcomes.

Landmark High School

In its multicultural demography, its reliance on community resources and connections, and its existence within a district bureaucracy, Landmark High School in Manhattan has much in common with Brighton and Oakland. But its relative newness and small size (400 students) make for a very different reform journey. With the mission of providing powerful intellectual experiences in a personal setting to underserved urban young people, Landmark was one of eleven small schools that New York City started in 1993 as part of the Coalition Campus Schools Project. Reporting to the Alternative High Schools Superintendent, and supported by a large network of small schools (funded by New York's Annenberg Challenge) and by the Coalition of Essential Schools, Landmark has maintained a fair amount of autonomy.

Like a number of its "sister schools" within the city, Landmark has built its program around a series of graduation portfolios through which students demonstrate what they know and can do, collecting evidence both in school and in community placements.

Although convinced of the value of this approach by the postsecondary successes of its graduates, the school is struggling with how to mesh its accountability system with new state testing requirements.

Rex Putnam High School/North Clackamas School District

One of three comprehensive high schools in the North Clackamas school district, just outside of Portland, Oregon, Rex Putnam High School is unusual among suburban schools for the far-reaching nature of its reform activities. In the past few years, the school has instituted a new block schedule, integrated ninth and tenth grade small learning communities, an Access period for small advisory groups, the "CIMfolio" portfolio system required by the state, and focused electives and career related learning experiences for juniors and seniors. In explaining their commitment to making such fundamental changes, leaders at Putnam point to a confluence in the past few years of top down and bottom up reforms.

In the mid 1990s, with the leadership of a new superintendent, and an entrepreneurial school-to-career director, a community-wide task force explored how school-to-career could become a vehicle for reaching the content and career standards called for in the recently amended Oregon Education Act for the 21st Century. A second task force worked on embodying that vision in new graduation requirements. At the same time, teachers from across the district began to take advantage of professional development workshops on contextual and project-based learning, initiated by the district's school-to-career office and implemented by Jobs for the Future. With clear messages from teachers that what they were learning was helping them to implement new content and career standards, the district expanded their investment into a coherent, sustained approach to professional development. As a result, a critical mass of teachers (at Rex Putnam it is now over half the faculty) have become proactive designers of new approaches.

Sir Francis Drake High School

Reform efforts at Sir Francis Drake High School began with the establishment in 1989 of a school-within-a-school program, initiated by the district in collaboration with a local high-technology foundation. Because the effort garnered early media attention and was led by several teachers "imported" from other schools, resentments and misunderstandings grew among the faculty. Despite this inauspicious beginning, though, a new principal and a lead teacher were determined to create one faculty out of what threatened to become two, and they focused the faculty on collectively finding solutions to a growing problem of student disengagement. Prodded by a district mandated-improvement process, the school identified a dozen areas for reform and soon initiated a new block schedule and advisory system.

Since then, Sir Francis Drake's reform process has been gradual and continuous, resulting in a high level of teacher and community participation in a data-based cycle of planning and evaluation, supported by Jobs for the Future and by the school's selection as an Annenberg lead school within the Bay Area School Reform Collaborative (BASRC). The school has four academies focused on different career areas, as well as integrated studies programs for ninth and tenth graders.

Quest High School

Located in Humble, a suburb of Houston, Quest High School opened in 1995 as a small, alternative program for students seeking an education very different from that available in the district's three large comprehensive high schools. Drawing on the principles of the Coalition of Essential Schools, the founding teachers organized the curriculum and assessment around a set of academic foundations, essential learner

behaviors, and workplace tools—which together comprise the standards for what students should know and be able to do. Students graduate when they can demonstrate that they have met all of the standards, and that they can address these either through projects in their courses or through community service work.

Through its family group structure and the self-paced character of student learning, Quest has tried to create a culture of personalization and academic accomplishment, a mission very similar to that of its urban counterpart, Landmark. However, Quest faces a particular challenge, based in its early history. Although viewed by its founders as a laboratory for best practices, the program's location within a facility for young people with discipline problems created a stigma the school is still struggling to overcome. Initially designed for 400 students, its population remains under 200, a size that teachers fear is too small to demonstrate the applicability of its methods to the larger system.

Emerging Patterns

Although we did not approach these case studies with the goal of reaching conclusions or developing findings about the process of reinventing or inventing high schools, certain patterns did begin to emerge. We offer these patterns as a starting point for readers who will no doubt discover in the case studies lessons that speak to their own particular circumstances and histories.

A Focus on Preparing Students for College and Careers

One of the most striking similarities across all of the schools is their focus on preparing students for both college *and* careers. The four comprehensive high schools (urban and suburban alike) are trying to achieve this mainly through career themes that help create a more personalized, contextualized environment for student learning, particularly in the upper grades. Oakland Tech, Brighton, and Sir Francis Drake each offer a variety of academies or pathways organized around broad career areas. Rex Putnam is currently implementing focused programs of study, many of which link to career interests.

Most of these career-focused programs of study include project work inside the school as well as internships in the community. Such experiences are designed to allow students not only to apply academic knowledge but also to develop "high-performance competencies" in areas important to both college and careers, such as problem-solving, teamwork, and information searching and management. These experiences also afford a significant number of young people the opportunity to work alongside adults who push and support them to meet real-world standards.

While not organized around career themes, the two small schools also create opportunities for students to extend their learning into community settings. To a greater extent than the large schools, Landmark and Quest hold students accountable for what they learn in these settings. Like their more traditional academic work, the projects students do in the community "count" within the performance-based and competency-based graduation requirements these schools have adopted. This points to one difference between the large and small schools: while all provide opportunities for students to learn alongside adults in community and work settings, the small schools make this experience available to all students, not just to those who elect to participate in career-focused programs of study.

The focus on preparing students for college and careers also allows the three urban schools—large and small—to take advantage of their location in vibrant and diverse

cities. Students in Oakland Tech's career academies and Brighton High's career pathways have adult mentors and internships in hospitals, software companies, cultural institutions, schools and universities, and an array of other local institutions. A small school with fewer course offerings of its own, Landmark takes advantage of the myriad learning sites and opportunities available in Manhattan, from libraries and museums to community organizations and workplaces.

Building on Community Resources, Pressures, and Supports

A second pattern can be seen in the ways that all of the comprehensive high schools have gained traction for their change efforts by taking advantage of resources, pressures, and support from outside the school. In a number of the districts, the local business community served as a catalyst to reform by offering to partner with schools in new ways. Leadership inside the school—coming in every case from the principal and teachers—enabled the schools to leverage business and community support into school reform.

In Boston and Oakland, the desire on the part of the business community to hire a more diverse and local workforce helped lay the groundwork for the initial career pathway efforts. In Marin, the non-profit foundation run by a local high-technology company saw an opportunity to help a school while experimenting with forms of education that would better prepare young people for high-tech careers.

In all these communities, business and community partners have played a role in mobilizing and sustaining support for schools' ongoing reform efforts. In North Clackamas, the district built upon support from business leaders for school-to-career reforms, first in creating sustained and coherent professional development for teachers, then in leveraging high school redesign in line with new state mandates emphasizing career-related learning.

At the same time, these schools have all felt political pressure to show improvements in student achievement, particularly as measured by high-stakes, standardized tests. Teachers and administrators are struggling to find ways to improve academic achievement without narrowing instruction to test preparation, and without narrowing the curriculum to only the academic content and skills likely to be included in state-level assessments.

This political pressure has been problematic to schools, like these, that are committed to teaching competencies, habits of mind, and work habits that students will need if they are to succeed in high-performance settings, such as colleges and workplaces. In all the schools, but particularly those in urban communities where scores tend to cluster in the lowest quartiles, the imperative to raise test scores has added greatly to the general stress level. The threat is particularly acute for Landmark, which has developed its own competency-based graduation process.

The (Sometimes) Uneasy Alliance of the District and an Entrepreneurial School

Each of the schools profiled has found that policies and actions in the district office both enhance and, at times, slow down, its efforts at redesign. While district leaders might encourage and applaud the entrepreneurial activities of these schools, they also worry about consistency and equity among all the schools in the community. This can make for a complex and challenging dynamic.

This is perhaps most evident in the small schools. Both Landmark and Quest were started when entrepreneurial teachers and administrators took advantage of opportunities created by their respective districts to form new small schools. Each enjoyed

some protection, at least for awhile, from some of the bureaucratic procedures that might not fit well with its very different size and structure. For example, Landmark reported to a superintendent for alternative schools, not to a borough superintendent. Recently, however, new high-stakes tests, mandated by New York State, have removed this aura of protection and left the school wondering how long it can maintain its unique educational program.

From its inception, Quest has enjoyed permission to experiment, but it has been unable to shed its reputation as a place for troubled youth. The administrators and teachers designing Quest saw it as a potential learning laboratory that would incubate educational ideas for eventual adoption in the district's comprehensive high schools. Instead, it stands very much apart from the system.

For ongoing support, both Quest and Landmark have relied mainly on networks of like-minded schools. As one of over a hundred new small schools in New York City, Landmark has relied on its network affiliation for everything from start-up ideas to peer review. Although more isolated geographically from similar efforts, Quest has stayed active nationally in the Coalition of Essential Schools and Annenberg Challenge networks.

Unlike the two small schools that had the opportunity to invent themselves, the four comprehensive high schools have all been involved in a multi-year process of reinvention. This, too, takes entrepreneurial action and has created its own challenging dynamics between these schools and their districts. Particularly in urban districts, the large schools have found themselves simultaneously appreciated as models of innovation and threatened by district policies that leave little room for deviation from the norm. Both Oakland Tech and Brighton were among the first in their districts to form career academies or pathways and to demonstrate the kinds of student outcomes such programs could produce. Both districts have made small learning communities based on career themes a centerpiece of their high school reform efforts.

This does not mean that relations between even these two schools and their districts have always been smooth. It is not surprising to find the leaders of entrepreneurial high schools expressing frustration with district policies and procedures, especially those affecting the composition and stability of the student body or the autonomy of the school principal—e.g., on budgetary or personnel matters.

Tapped to become a member of Boston's High School Restructuring Task Force, the principal of Brighton High used that opportunity to challenge the committee's district members to change policies (such as the transfer procedures that allowed a constant flow of students in and out of the district high schools throughout the year) that stand in the way of school-based change. After riding the changes brought about by several turnovers in the superintendent's office, the principal of Oakland Tech recently elected to leave the bumpy terrain of high school change to head an elementary school in the district.

Located within smaller school districts, serving fewer schools and students, suburban high schools deal with less red tape but also find it harder to hide—or as teachers sometimes put it, "fly under the radar." Both of the comprehensive suburban schools in our study have experienced some turbulence in their relationship with their districts, but both are also finding ways for the district to take on some of the functions of a network and to act less like a regulatory agency.

The district initially targeted Sir Francis Drake High to house a new integrated studies program because the school lagged behind the other two high schools in student performance. Many people at the school felt threatened when the district brought in faculty from the other high schools to lead this school-within-a-school. In recent years, however, Drake has been able to rely on the district office to help directly with its emphasis on data-based reform. The district sends out and analyzes teacher, parent, and student surveys that have been quite helpful to the school, and it also provides the school with timely analyses of test-score data.

Relations between the district office and Rex Putnam High School in North Clackamas went through a similarly rough period several years ago, when Putnam wanted to go school-wide with its new model for grade nine to ten integrated studies; the district, hoping for more consistency across its three high schools, wanted Putnam to slow the reforms down a bit. The school and the district have since found a more synergistic relationship. Putnam faculty have been willing to show their work-in-progress to other district schools: in "design studios," teams from other schools not only visit Putnam but also work on their own strategic plans for reform. The district has also asked Putnam faculty to lead strategic planning sessions for all of the town's administrators.

Partners in Change

As these patterns illustrate, despite differences in size and demographics, the six schools profiled in this volume offer collective as well as individual lessons. Shining through all of the stories is the tenacity with which teachers and administrators in these schools believe in the importance and feasibility of preparing students for a lifetime of learning and earning.

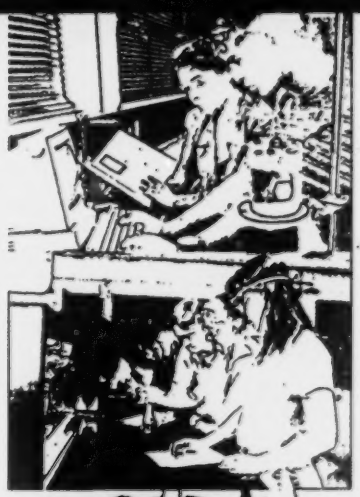
Although certainly not offering a blueprint for schools to follow to realize this vision, the case studies illustrate how both large and small schools can create more personalized learning environments that give students multiple opportunities to apply school knowledge and skills in the world outside. In particular, these stories can help other schools understand the importance of making community connections that go beyond creating or finding learning resources and learning opportunities for students. The case studies illustrate how six schools have used external support and pressure—from business and community leaders, as well as from intermediary organizations and networks such as the Coalition of Essential Schools and Jobs for the Future—to create and maintain the momentum for change.

Schools in the process of change can also gain useful insights into the potential barriers that must be overcome in reinventing or inventing high schools. As the stories illustrate, lead teachers and administrators involved in reforming or creating high schools can expect to find themselves simultaneously applauded for trying new things and resented for special waivers or privileges, encouraged to proceed full steam ahead and urged to slow down. Finally, the stories in this volume underscore the ongoing challenges of maintaining the momentum behind active, contextual, and community-based learning strategies while addressing the political pressure to show immediate improvement in student achievement, as measured by high-stakes, standardized tests.

In illustrating both the possibilities and challenges of high school change, the case studies map out the terrain that must be crossed in order for entrepreneurial schools, their communities, and their districts to truly become partners in change. Ultimately, the reinvention of the high school depends on just such partnerships.

Oakland Technical High School
Oakland, California

Reinventing High School: Six Journeys of Change



A Case Study of Oakland Technical High School
Oakland, California

Real Changes, Persistent Challenges: Managing Multiple Reforms in an Urban High School

By Tom Malarkey

It's 8:25 in the morning, and students are streaming through the columned entrance of Oakland Technical High School. One of the city's six comprehensive high schools, "Tech" sits on Broadway Avenue, a central artery that runs from the whiter, more middle-class north side, south through the resuscitated "Auto Row," and on into downtown Oakland, California. The school's impressive façade stretches along a whole city block; across the street, a variety of fast-food restaurants draw many Tech students throughout the day.

A group of girls, primarily African Americans, stands outside talking before school begins. Although they live in the same neighborhood and attended the same middle school there, they will head in different directions once they walk through Tech's doors. Two will spend most of the day together, along with a group of peers in the Computer Academy on the second floor, leaving only for art and PE. Another girl will be off campus for half the day at an internship for the Health Academy program. Two others are not affiliated with an academy and will move around the campus for classes, each of which will be with a different group of students. And a Latina student will spend part of her day attending classes in the bilingual program and the other part in the Business Academy.

Having struggled for several decades with problems endemic to many urban high schools—including school safety, academic mediocrity, and high drop-out rates—Oakland Tech has become perhaps the city's most dynamic and reform-oriented high school. It houses six career academies, sends many graduates to college, has received several major grants, and is engaged in a variety of whole school reform efforts. Once imbalanced racially, its 1,700 students are now roughly representative of students in the Oakland Unified School District: 65 percent of Tech students are African-American, 20 percent Asian, 10 percent Hispanic, 4 percent white, and 1 percent "other."[1]

However, the challenges remain daunting, as any teacher at the school will tell you. Generating real coherence across programs...dealing with the "hall-walkers" and chronic fire alarms...stemming the tide of attrition in ninth grade...supporting the newer academies to reach the high standards set by the original two...reaching the many students whose skills are weak and are disaffected from school.... The list could go on.

More than anything though, Tech's successes and ongoing struggles represent the complex, contested, and fragile nature of urban school reform. Its story is one of a high school attempting to leverage change, especially for its lower-achieving students, through two reform streams: career academies and various types of "whole school" change. It sheds light on a set of issues key to deepening our understanding of reform:

- How various reform strategies affect students and teachers in different ways;
- How Tech's reforms have both created a powerful focus on equity and raised new dilemmas around equitable access and student achievement;
- How the existence of powerful models in parts of a school does not guarantee learning from those models across the school; and
- How the complexities and tensions of reform in large schools can both stimulate teacher leadership and create teacher burnout.

Tech serves as a powerful example of a school that has made real change yet is struggling to find ways to sustain and deepen that change—and, most of all, see change make a difference for students who have traditionally been least helped by past reform efforts.

Oakland Tech is comprised of multiple communities within one school. It houses six career academies for tenth, eleventh, and twelfth graders. The Health and Bioscience and Engineering academies were launched some fifteen years ago; Computer, Business, Education, and Fine and Performing Arts have begun operating since 1996. Several of these academies have become national models for the effective integration of academic and vocational education. They have created powerful small learning communities and dramatically increased the number of Tech students attending four-year colleges and passing advanced placement exams. About half of the tenth, eleventh, and twelfth graders are enrolled in an academy, with the other students remaining in the general program.[2] In addition, Tech has several other small learning communities, along with traditional special programs, such as bilingual education and special education.

[1] "Other" includes mostly Filipinos, Native Americans, and Pacific Islanders. In addition, 30 percent of Tech students receive AFDC, 40 percent qualify for free or reduced lunch, and 18 percent are limited English proficient.

[2] The academies are not totally self-contained: students generally take four of their courses in the academy and the rest in the general program.

Beyond the work in the academies, the school has undertaken a variety of whole-school reform efforts with the help of outside funding and organizations. In the last three years, Oakland Tech has created various systems of support that target student achievement and retention in the ninth grade, especially the disproportionately low achievement of African-American, Hispanic, and non-Chinese Asian students. In addition, Tech has engaged in various forms of action research and data-based inquiry, democratic governance, and teacher leadership. To inform teaching and programmatic decisions, teachers and administrators—in various configurations—regularly gather, disaggregate, and analyze data on student achievement. And the school is pushing hard to create more personalized learning environments for its students as a way to reduce the drop-out rate and incidents of violence and to increase achievement and college attendance.

All this has been aided and spurred by a number of grants and external support providers. Oakland Tech has become a BASRC leadership school (the Bay Area's Annenberg Challenge) and a Digital High School. It has received a federal 21st Century Community Learning Center grant, and it has begun to work closely with the Bay Area Coalition of Essential Schools.

Although Tech's reform efforts have yet to significantly raise student achievement levels across the school, the school seems far better positioned to do so than it was in the early 1980s. How have these reforms evolved? And what obstacles still make "success" quite difficult?

The "First Generation" Academies

Fifteen years ago, Tech was a very different school. Despite the presence of a number of effective and committed teachers, it had been marred by violent incidents, academic mediocrity, weak college attendance, and ineffective leadership. The curriculum was largely individually driven: each teacher set his or her own standards and expectations for the students. At that time, the student body was more than 90 percent African-American, compared to 60 percent in the district. The school had a complex system of tracking and a small honors program. Most of North Oakland's middle-class residents had abandoned the school, sending their children to private schools or fudging their addresses to gain access to Berkeley High School and its strong honors track.

In 1984, Tech reopened at the Broadway campus after operating for several years at an alternate site during earthquake retrofitting and interior renovations. When it did, a new principal, Dennis Chaconas, came with the desire—and a district mandate—to create a new vision for the school.[3] The Health and Engineering Academies became linchpins in the effort to reconstruct Tech's image and performance. These academies started within a year of one another (Health in 1985 and Engineering in 1986), and both went on to become quite successful, yet the origins and the driving force behind each differ significantly.

The Health Academy

The Health Academy evolved from a top-down initiative. Advocates of local school-business partnerships had persuaded the district to support several pilot career academies, based in part on the success of the "peninsula academies," which had been launched across the bay in 1981. At this time, the state passed legislation to fund

[3] In February 2000, Chaconas became Superintendent of Oakland Unified after six years leading the smaller Alameda School District nearby.

ten replications of these academies. By law, schools that followed what became known as the California Partnership Academy model had to serve at least 80 percent "at-risk" students. In addition, a group of CEO's of Oakland hospitals had gone to then-Superintendent Joe Coto to express their interest in attracting local youth, and youth of color in particular, into health careers. In contrast to the hospitals' clients, their staffs were largely white and suburban.

The district moved to develop the Health Academy at Tech and relied on Chaconas to make it happen. He asked English teacher Patricia Clark to help spearhead the effort to launch the academy, with funding from the new legislation. A core of interested teachers was recruited, and, after several months of planning, the academy opened its doors in the fall of 1985.

From the beginning, the Health Academy aimed to serve a representative group of Tech students, ethnically and academically. Also from the start, the team of teachers Clark had assembled was committed to high expectations and a college preparatory program, connections to the health field across the curriculum, powerful work-based learning experiences, a sense of multicultural community, and a strong sense of professional collegiality and experimentation among teachers. As Clark tells the story, "We believed if you gave us kids, we could succeed with them. We deliberately recruited from the bottom tracks—many kids who never got to take college prep classes. But we didn't want the 'vocational' or 'remedial' labels on the program either."

The academy developed a project-based curriculum that integrated investigations of the health industry throughout the core academic classes of math, science, English, and history. The team developed a Senior Project that involved an exhibition and career exploration. Clark and the rest of the academy team became skilled at developing partnerships that enabled a variety of institutions—hospitals, universities, agencies—to provide students with high-quality internships, work-based learning experiences, and mentoring from professionals. Health Academy students got accustomed to leaving the Tech campus for significant parts of each week, especially during their junior and senior years. Just as important, the students were well-known by the core of teachers they came to work with over their three years in the Health Academy.

In addition, the academy team became effective entrepreneurs—writing grants, developing relationships with funders, and adding new dimensions to the program. All this took time and resources, but the academy was amply funded by the State Partnership funds and, later, the Oakland Redevelopment Agency. And holding all this activity together was a strong sense of professional community among the educators involved: they had in common their beliefs about teaching, a commitment to equity, and a desire to share their work and continually improve the program. The Health Academy went on to become a model within the national school-to-career movement, and it established a strong track record of success with students: roughly 80 percent of its students go on to higher education, the great majority of those attending four-year colleges. And it has achieved this while continuing to serve a fairly representative group of Tech students.

Among the Tech faculty, however, the Health Academy was controversial. As veteran Health Academy teacher and leader David Deleeuw points out, "Pat [Clark], in particular, and our program in general, served as a lightning rod for pedagogical reform in the school. It attracted support, and it attracted bitter hostility—in about equal parts." On the one hand, the program galvanized teachers who shared the academy's

pedagogical and curricular philosophy and who were looking for ways to reform teaching and learning. On the other hand, it drew suspicion from teachers who believed that academies and other specialty programs were a new way to segregate and track students—and who resented the top-down manner in which they perceived these programs were brought in by Chaconas.

Engineering Academy

Launched a year after the Health Academy, the Engineering Academy (originally called the Pre-engineering Academy), began as a bottom-up effort—driven by two teachers who were looking for a way to create a high-level academic program centered around physics and drafting.[4] As part of his effort to revamp Tech's image and performance, Chaconas had recruited several well-regarded teachers from Fremont High School across town. Carl Hertenstein, a distinguished physics teacher, had been frustrated that graduates of Oakland's public schools did poorly in college physics. Parker Merrill, a veteran Oakland Unified drafting teacher, had struggled to find jobs for his students. The two collaborated to develop the concept for a project-based curriculum weaving together physics, mechanics, and drafting, all of which required high levels of applied mathematics in solving design problems. Academy students use algebra, geometry, and trigonometry to solve physics problems, then move on to using calculus in higher-level classes. "The graphics sequence gives them the ability to visualize the 3-D world," says Merrill. "When they can visualize the 3-D world, physics makes a lot more sense to them. At the same time, the physics is a practical application of the math."

From the beginning, the designers of the Engineering Academy had clear outcomes in mind: students would be able to pass advanced-placement exams in physics and calculus. The academy's well-established course sequence is geared to ensure their preparation for these hurdles. Accordingly, it actively recruits incoming tenth graders, who must have completed the equivalent of geometry to qualify for the academy's math sequence. This requirement means that the academy attracts and serves disproportional numbers of Asian and white students, and middle-class students in general. The academy's students are roughly 25 percent African-American, 56 percent Asian, 9 percent Hispanic, and 10 percent white. With increasing efforts to recruit African-American and Latino students, the academy has had some success in enrolling a more representative group of students, but the proportions still notably differ from those of the school at large.

Engineering has had significant success in achieving its outcomes. Its students score extraordinarily well on advanced placement tests, and virtually all graduates have gone to strong four-year colleges and performed very well. Says Merrill, "Most schools don't use much math in their physics courses, so when they get to college the kids don't have in-depth experience. Our students come back from college all the time, and they're like 'this is the greatest; we're tops in our physics class; we're just tearing the place up.' So we get a lot of very positive feedback from the graduates that this is a successful program."

In Room S-3, the core computer laboratory and instruction room, the academy's character is immediately apparent. Located in a separate building behind Tech's main campus, Room S-3 is filled with a seemingly endless number of sophisticated

[4] At first, Pre-Engineering was not formally a career academy. It was a *program* that combined work-oriented content with rigorous academics, but it did not integrate these across the curriculum. In 1989, the original directors agreed to be included in the district's growing group of career academies.

computer-generated graphic designs adorning the walls—all done by students—along with the awards and ribbons their efforts have earned. Students work both independently and collaboratively on large computers, comfortably using the same sophisticated software as professionals (such as AutoCad, Mechanical Desktop, and Architectural Desktop). Rotating three-dimensional objects and altering the mathematical formulas behind the designs, these students are clearly familiar with and confident in this environment. They remain in S-3 for lunch, and many stay after school to work and connect with friends. The academy clearly imbues its students with a history of success, a culture of high expectations, and a strong sense of community. Although students say the work is intense and the pressure significant, they seem relaxed and interact comfortably with teachers.

An important component of the Engineering Academy's success has been its ability to attract significant funding from corporate sources. Unlike the Health Academy, the designers of the Engineering Academy chose not to become a State Partnership Academy—with its attendant funding, requirements, and defined focus on "at-risk" students. However, by quickly demonstrating success with students, the academy attracted large grants from IBM and Bechtel; these have enabled it to purchase high-level computers and fund internships and other activities. In response to concerns about inequitable distribution of resources within Tech, Merrill argues that the academy's independent resources have allowed the rest of the school to be more amply funded when other money comes in, such as the recent Digital High School grant.

A key development in the evolution of the Engineering Academy was its partnership with the newly created Paideia program in 1987. Based on a model developed by University of Chicago educator and philosopher Mortimer Adler, Paideia integrates English and history into a rigorous, college-preparatory curriculum that stresses critical thinking and project-based learning using Socratic methodology. Tech's Paideia program had been created by several reform-oriented teachers, one of whom, Marianne Wolf, Chaconas had recruited from another school. It is explicitly designed to prepare students for the AP exams in English, U.S. history, and government. As such, it immediately began attracting high-achieving students to Tech, as did the Engineering Academy.

The two programs partnered to offer a high-level curriculum to a largely common group of students.[5] So while Engineering didn't follow a "pure" academy model (integrating a focus on engineering across English and history), the alliance with Paideia allowed students to receive a college-preparatory curriculum across their academic program. And while the programs' academic values are clearly aligned, they retain distinct curricula and senses of community, and they tend to collaborate little.

Together, Engineering and Paideia now occupy the niche at Tech that an AP/honors-level track does at a traditional high school—with the significant difference that their curricular foci and hands-on and Socratic pedagogies are distinctly untraditional. Students from both programs have established an impressive record on AP and college-entrance exams. In fact, across the district, Tech is the school with the highest number of AP exams taken—and the highest success rate.

[5] Although roughly 80 percent of the students are cross-enrolled in both, other students can enroll in either one or the other, pending admission requirements.

Academy Impact on the School as a Whole

These two first-generation academies—Health and Engineering—along with the Paideia program, quickly established a reputation for innovation, excellence, and results. This had several effects on the school, a key one being to significantly shift Tech's "reputation" in the community—and its demographics. Through the late 1980s and into the 1990s, Tech became a magnet for increasing numbers of middle-class students and families who had not previously considered it a viable option. The school also began to attract increasing numbers of "academically upwardly mobile" students—many of whom were Asian, often poor, and from the far side of the district. These families sought out Tech for its specialized academic programs. In addition, shifting demographics brought more Asian families to the district, and to Tech's attendance zone in particular. White students have come to Tech in increasing numbers, although their overall representation hasn't gone above 5 percent.

Internally, though, these programs often faced opposition from other parts of the school, and at times, the district. Concerns about equity, special resources and funding, and preferential treatment required the academy directors to be politically astute—and at times simply fierce—to keep their programs going. The Health Academy has had more success integrating itself into the life of the school—both by serving a fairly representative group of Tech students and through its leaders' efforts to be involved in whole school reform activities.

On a broader level, these first-generation academies brought Tech into the limelight of the emerging "new vocational" movement. They became regional and national models for the successful integration of academic and career-oriented education. At a time when educators and policymakers were looking for visions of what integration might look like, Tech's academies provided several persuasive models. Locally, they demonstrated that powerful teaching and learning could exist programmatically beyond isolated classrooms. And they established examples of professional learning communities that enabled teachers to collaborate and engage in professional development through a common curricular focus and shared responsibility for students.

Given the success of the first-generation career academies, why, then, did Tech take 10 years before creating more academies? Other Oakland high schools, with the support of the city and district, were beginning to launch their own academies in the late 1980s and early 1990s.

Amid the variety of reasons, several stand out. Successful academies require significant teacher leadership, time, and common vision; it may be that the people involved with launching the Health and Engineering academies were unusual in their commitment and abilities. Certainly, some other teachers were averse to the workload or preferred their own autonomy. There were micro-political reasons as well: as much as these academies demonstrated success, they also bred resentment from some faculty, which made it less likely that these teachers would emulate them. Their programmatic distinctness also made the extension of their work more difficult, and leadership issues were key as well. Once Chaconas left in 1990, subsequent administrators chose not to push the creation of new academies. And by the early 1990s, other emerging reform efforts captured the attention and energy of many change-minded teachers at Tech who weren't involved in the academies.

The District Scales Up Career Academies

1996–97 proved to be a pivotal year, with two major changes that would catapult Tech into a different reform era and extend restructuring efforts to a much broader range of the school's student and teacher population. The first change was the district-driven scale-up of the academy model, which led Tech to launch four new "second generation" academies in three years. The second change was the teacher-driven scale-up of whole school reform efforts, which led to a series of large grants for whole school reform, technology, and after-school student and family support. Further, with Larry Todd's arrival as principal in 1997, Tech became a hotbed of reform energy—and began to face in a new way the politics and complexities that tend to accompany major change. On top of all this, a bitter teacher strike in 1996 left divided camps and precipitated the retirement or departure of some veteran teachers.

OaklandWorks and School-to-Career

In the district and the region, the "new vocationalism," in general—and the career academy movement, in particular—had been gaining ground. By 1988, the district had four successful academies up and running. Moreover, two years earlier, in 1986, Allie Whitehurst, a persuasive advocate of these reforms, had been appointed as Oakland Unified's Academy Director. She worked tirelessly to promote the idea of career academies as an approach to reform.

Along with allies in the private sector, Whitehurst convinced the Oakland Redevelopment Authority to provide initial funding for eight to ten academies in the city, beginning in 1990. This was a huge boost: the money paid mainly for student internships and teacher development, and the high-profile support increased career academies' legitimacy in the public eye.

When the School To Work Opportunities Act of 1994 provided Urban/Rural Opportunities Grants, Whitehurst and the district patched together these and other sources of funds to launch and operate new academies at several high schools. Finally, these efforts persuaded then-superintendent Caroline Gettridge and the school board to commit the district to supporting a dramatic scale-up of career academies. It was not insignificant that the district was then in dire need of successful programs.

In the spring of 1996, the district adopted "OaklandWorks: A School-to-Career System," a blueprint for bringing career academies to scale in all six of the city's comprehensive high schools. The goal was to create an articulated system of career guidance, support, and opportunities for all students, as well as a range of career academies for students to choose from and enter as tenth graders.

The OaklandWorks program model for a career academy included seven components:[6]

- *School-based learning:* Three academic classes and one lab class, an integrated academic and vocational curriculum, and student portfolios;
- *Work-based learning:* Job shadowing, internships, and service-learning;
- *Guidance and counseling:* Student recruitment and selection, postsecondary placement assistance, and career interest assessment, mentoring, and individual and group counseling;

[6] This is a condensed list of the program elements for each of the seven components.

- *Parental and family involvement:* Parent contract, parent participation in program, and parents well-informed about the program;
- *Postsecondary linkages*: Articulation/partnership agreements, Tech Prep programs, community-based employment training programs, and 2+2, 2+2+2, and 2+4 programs;
- *Community involvement:* Advisory committee, speakers, job placement, business partnerships, and OaklandWorks certification; and
- *District and school support:* Planning and coordination time for teachers and directors, administrative support, flexible master scheduling, adequate facilities, and staff development.

OaklandWorks led to a flurry of activity at the comprehensive high schools as administrators and faculties generated ideas for academies, enlisted teachers for start-up leadership, and jostled with other schools and the district about which academies would be housed where. In the beginning, Whitehurst and the district had hoped each high school would develop "wall to wall" academies: every tenth-, eleventh-, and twelfth-grade student and teacher would be part of an academy. However, only one school has done this; others, like Tech, have preferred a more voluntary and gradual approach.

Today, the district has thirty-three career academies—including at least three at each high school. Around the country, Oakland Unified is seen as a pioneer in expanding the model across a large district. The district says that some 50 percent of Oakland's 10,000 high school students participate in academy programs (although somewhat fewer are fully enrolled). In several schools, academies enroll as little as 10 percent of the student population; others, like Tech, enroll 50 percent or more. Fremont High School places all of its students into one of six "houses" or academies. The district did not expect every academy to implement the OaklandWorks model fully at the start. A recent evaluation of the 17 academies funded by the redevelopment authority showed mixed results in having all components present and accessible to all students.[7] Funding has been a crucial factor. Although academies receive modest funding from the district and can apply for city funding (through the Oakland Redevelopment Authority) or state funding (State Partnership Academies), the newer academies in particular still lack adequate resources to provide release time for co-directors and internships for all students.

Tech's role in these district-level developments was crucial. Teacher leaders from Tech—notably Pat Clark and David Deleeuw of the Health Academy—played pivotal roles both in influencing district leaders about the efficacy of the academy model and in helping the district think about how to scale up its efforts. These teachers, along with others in the district, have provided crucial continuity and inspiration for pushing reform forward in a district that has had significant leadership transition, despite Whitehurst's ongoing role. Clark, Deleeuw, and others have been willing to be public and political beyond the bounds of their significant in-school responsibilities. Several teachers have also been influential in the regional and national school-to-career movements.

[7] Maxwell, Nan, and Victor Rubin, Principal Investigators. 1999. "The Oakland Career Academies, Final Report." Hayward, CA: Human Investment Research and Education Center.

The Second Generation Academies

OaklandWorks led to the opening of four new academies at Tech: the Computer Academy in 1996, the Business Academy in 1997, and the Education and Fine and Performing Arts academies in 1998.

The selection of these career areas occurred through a variety of factors. The major influence was discussion among the faculty: even before the final OaklandWorks plan was out in 1996, Tech faculty had begun discussing what academies they would start. The district also played a coordinating role, trying to create a variety of academies across the six high schools, with as few replications as possible, and to ensure that the new academies met actual community and workforce needs. Although the district was encouraging schools to go "wall to wall" with academies, teachers at Tech felt strongly that the decision to join an academy should be voluntary, and a number of teachers did not want to teach in one. Originally, Tech had conceived a fifth new academy in hospitality, but it lacked enough teacher interest to get off the ground.

The Computer Academy was the first to get up and running. Driven by a core of three teachers, this academy sought and received funding through the State Partnership Academy program, which committed it to serving 80 percent students "at risk." This academy's leadership has remained largely in place (one key teacher has left), and it has developed a strong academic program.

Such was not the case with the Business Academy, which was the next to start. Originally led by Melne Chappelle, the Business Academy lost virtually all its founding teachers after the first year. Chappelle was drafted to become the Tech's School-to-Career Liaison with the district, and other teachers either transferred from Tech or left the academy. Although committed, the new co-directors do not work closely together. As a result, the Business Academy has struggled to develop its program and maintain deep relationships with students. The most recent academies, Education and Fine and Performing Arts, have started with much enthusiasm, although they are encountering similar challenges.

Oakland Technical High School Student Population, 1999–2000

Academy	Approximate Number of students[8] (10–12th grade)	Years open
Health and Bioscience	200	15
Engineering	120	14
Computer	140	4
Business	60	3
Education*	40	2
Fine and Performing Arts*	60	2
Total in Academies	*620*	
Total non-Academy	600	

* Enrolled only tenth and eleventh graders in 1999–2000. The academy will add twelfth graders in 2000–2001.

[8] These numbers are for the 1999–2000 school year and approximate the number of students *on record* enrolled in the academies. Typically, the actual number of students enrolled in a "full" academy program (i.e., four academy courses) is slightly less.

In general, the new academies have followed the seven-part OaklandWorks "template," which was, in part, developed to reflect the structure of the district's first-generation academies. The academies are not fully self-contained, even though they are referred to as "schools-within-a-school." Academy students take at least four courses within the academy—typically English, history, math, and science, plus a "lab" class that involves them more directly in the vocational content of the academy's career field through internships, service-learning, job shadowing, and direct study. Students take their other courses (e.g. arts, physical education, bilingual education, electives) in the school's general program. Ideally, each academy course weaves together academic and vocational components, although the newest academies are still developing the career strands across their academic courses. The district's academy model provides more of a structural framework than a concrete pedagogical vision. It has been up to each academy to construct a common vision for teaching and learning among its staff. Again, such a vision has emerged more clearly in the older academies than in the newer ones.

In the spring of ninth grade, Tech students can select an academy to enter as tenth graders. A number have already chosen Tech because of a particular academy; others make this decision after arriving. In 1997, the district implemented Career Education and Training (CET), a required semester-long class for ninth graders at all high schools.[9] Designed to expose incoming freshman to each school's academy options and career development in general, the class has received mixed reviews from teachers and students but is generally seen as providing useful information. Although student demand is strong, Tech's career academies rarely have to turn students away. Actually, several of the second-generation academies are undersubscribed and working hard to recruit more students.

Two teacher co-directors coordinate each academy. Their responsibilities are considerable: district compliance requirements, grant administration, communication and coordination with outside partnership organizations, communication with families, managing student interventions, managing the academy's publications, and coordinating the teaching team and curriculum development. Depending on an academy's funding, these teachers either get a release period to coordinate academy work or a stipend to work beyond a full teaching load. Understandably, the co-directors of the newer academies are struggling to manage all of the start-up administrative work.

In addition to the co-directors—who typically teach all their classes inside the academy—each academy has a group of faculty who teach a full or a partial load of their classes in the academy. Their involvement with the "life of the academy" ranges from teaching one or two sections of courses to full teaching and participation in planning, program development, and events. Teachers choose to affiliate with an academy. Some stay involved for years; others rotate yearly; some even teach in more than one academy. Participation in an academy is often perceived as more demanding, so academies and the school administration must at times actively recruit teachers to join.

Because the academies are not fully self-contained, the whole school schedule constrains their ability to control student and teacher time. The school's master scheduling process puts the priority on blocking students into their four academy classes rather than on creating common planning time for academy teachers. Some academies manage to schedule double blocks of integrated curriculum (e.g., a math/science block that runs for two periods). However, none have been able to create common planning time for teachers.

[9] CET is paired with Multicultures, a second-semester class.

Academy teams typically meet at least once a month. Because of the schedule, they tend to meet after school or during lunch. Their agendas include setting goals, developing partnerships, and the details of grant-writing, as well as a great deal of planning and date-setting. Given district requirements and the complexities of managing so much work beyond the classroom and school, academy teams rarely have time to discuss student work or engage in professional development.[10]

Some teams meet more frequently. For instance, the Health Academy team meets weekly to discuss students and issues around curriculum and teaching. "There's no formal agenda," says Deleeuw. "We spend little time with academy business. It's mostly focused on kids and teaching." The "business" aspects of this academy are handled by the co-directors and, at times, by other teachers in the academy, who receive stipends for this.

The sense of professional learning community, built early on in the Health Academy, has been elusive for the newer academies, however, as they struggle with issues of time, resources, teacher turnover, collective commitment, and common vision. Chappelle hopes that the data-based inquiry model learned from the Bay Area Coalition of Essential Schools will help the academies begin to engage more regularly in assessing student data, investigating inequities, and making changes using a collaborative action research model.

Although Tech has successfully run two academies for some fifteen years, their impact on the second-generation academies has been mostly indirect—flowing first to the district, then back to the school. While the new academies have benefited some from the on-site experience of the Health and Engineering academies, they have invested most of their energy on their own start-up and on implementing the district model and its various requirements and reporting. Thus, the successes of the first-generation academies have been difficult to capitalize on for the second-generation academies. According to Deleeuw, the specificity of the Health Academy's career focus means that it can give better support to other health academies in the district (and elsewhere) than to Tech's other academies.

A Look into a Second Generation Academy

The Oakland Tech Education Academy (OTEA) illustrates both the promise and the challenges of the second-generation academies. Even as it struggles to develop its curriculum and internships and to achieve some stability, the idealism of the students and staff runs high as they assemble the pieces. In its second year, OTEA had 40 students in 1999–2000 (14 eleventh graders and 26 tenth graders), 75 percent of whom are African-American. The staff is comprised of two teacher/co-directors and several teachers who teach classes both in and outside of the academy. After a first year full of behavior problems, organizational difficulties, and "just drama," according to Academy Co-Director Nadirah Moreland, it is becoming more stable. A loyal group of students speak very positively about their experiences and their hopes. "It almost feels like being back in elementary school—we get all that one-on-one attention." "We'll be more prepared for college and for teaching." "I look at things differently now, like I'll go to the public library and see what engages the little kids when they read. And that makes me think about my own reading."

The students take four grade-level academy courses together: an education "lab" course and three academic courses (English, history, and science). Moreland teaches

[10] On its end, the district would like academy directors to do more to use available data for learning and management purposes.

A Student Chooses an Academy

When Tanisha Morris entered Oakland Technical High School as a ninth grader, she'd heard its reputation as a "better" school than many of the others in Oakland—and as a place that was big and at times scary.[11] And she knew she'd face an important choice during her first year: whether to enroll in one of the six career academies or to remain in the general program.

Tanisha looked into the different options at the school's career fair day, and she listened to the grapevine about the different academies, yet she was fairly clear from the start: she wanted to join the Education Academy. Even though it was new and its academic reputation didn't match that of several other academies, she was clear about her longstanding desire to become a teacher.

As a sophomore now and part of the Education Academy's second cohort of students, she's extremely happy about her choice. Although she has complaints about rowdiness in some classes and not enough resources, she acknowledges the challenges that the academy and its co-directors face. Tanisha is loyal, optimistic, and willing to advocate for getting the academy more of what it needs.

[11] Tanisha Morris is a pseudonym.

tenth-grade social studies as well as the tenth-grade lab class. Hellon Key, the other co-director (who also chairs the science department), teaches tenth-grade biology and the eleventh-grade lab class. Joshua Krummenoehl teaches tenth-grade English and coordinates the academy's newsletter. Several other teachers teach a section or two. Academy classes are scheduled back to back as much as possible, so students can spend sustained time in the academy each day. The curriculum is intended to be thematic and integrated across subjects: for example, a tenth-grade focus on human development through adolescence allows for the study of child growth in biology, coming-of-age novels in English, and comparative study of development and education in world cultures. The plan is for twelfth graders to complete senior projects in 2000–2001. In 1999–2000, the teachers are implementing student portfolio's in the tenth grade, with plans for the students engage in an exhibition at year's end.

In the lab classes, students explore career options, make and debrief from weekly visits to work at the local elementary and middle school, and engage the academy's career curriculum. (Tenth graders study the psychology of education, eleventh graders the history of education, and twelfth graders the sociology of education.) According to Moreland, these lab classes are quite important, but perhaps less for their vocational value than as a place that's different—and more personal—than typical school. It allows Moreland and Key time to get to know their students in different ways and check in with them about homework, family, grades, and what's up in their lives. "Many of our students are like general program kids: they forget forms or don't get their parents to sign them, don't come regularly to school, have say a 0.5 GPA." For such students, the academy offers a place where they can build a healthy peer group and have positive relations with adults.

Recently, OTEA applied for and received a State Partnership Academy grant that will allow release time for the co-directors to do more planning. In addition, the academy has an Advisory Board made up of local educators and community members. And while the program's academic and career-oriented dimensions are very much in development, OTEA is beginning to make a difference for its students. "Last year, we had so many challenges, there wasn't much we did well," says Moreland. "This year, we'll have more to say about the possibilities."

Dilemmas of a Co-Director

During Nadirah Moreland's first year teaching—and her first at Oakland Tech—she faced a significant career decision: should she become co-director of Tech's new Education Academy. It would involve much time and responsibility. She would not get release time from her five classes of teaching; rather, she'd get a $4,000 stipend and would be expected to perform her co-director duties on top of her teaching schedule. She had been involved with the action research team that planned the academy. And as a young teacher drawn to the field, she was passionate about the possibilities the Education Academy had to offer. But as co-director?

When it became clear that other teachers involved with planning the academy were not interested in the position, Moreland decided to step up and take the plunge. Now, in her second year, she is in deep. She writes grants, coordinates partnerships, counsels students, and completes many of the forms and reports required by the district. Some days she is thrilled at how far the academy has come and how much she has learned. On other days, she is overwhelmed and doesn't know how all the work will get done. In general, she relishes being a role model and developing the relationships she has with her students. "One student even calls me Auntie. I think that as an African-American woman who looks like and acts like and talks like somebody that they know, when I say something they have respect for that."

Assessing the Impact of Academies at Tech

Teachers express a range of feelings about Tech's second generation of academies. Clearly, many academy-affiliated teachers have been thrilled to develop a new program, new types of relationships with students, and new approaches to teaching. Others feel the district forced additional academies down the school's throat—without providing the structural support and resources to ensure their success.

Whatever the case, two things are true: Tech has a much livelier and more accessible array of career options for students now; at the same time, the second-generation academies generally have a long way to go before reaching the high standards set by the original two. Data from the fall of 1999 show that the three newest academies (Business, Education, and Fine and Performing Arts) have high percentages of students with GPA's below 2.0 (a third to almost a half). Although this is partly due to the students the academies serve, it also points to their struggles to build strong programs.

Oakland Tech's academies do not suffer from the traditional stigma associated with vocationally oriented programs. Just the opposite: the students *most* likely to attend college tend to be in its academies. If anything, some of the academies are considered elitist. Because neither a strong honors nor AP program were in place prior to the academies, the first-generation academies—Engineering, in particular—could develop higher-level instructional programs without having to "compete" with existing programs for student enrollment. More important, the academies have been the site of much of Tech's most powerful reform-oriented work, including the introduction of innovative teaching practices, curricular integration, personalization, and teacher collaboration. They have also been the forum for much entrepreneurial creativity: the academies have allowed space for passionate, dedicated, and entrepreneurial teachers to create learning environments that go far beyond what has

seemed possible in the regular part of the school. These teachers have put in far more hours than their union contracts stipulated—the academies became their life-work. The academies also extended learning well beyond the walls of the school, forming partnerships with outside organizations and exposing students to worlds beyond the school.

A key challenge for the academies, however, has been the recruitment of African-American students; as a group, they have been less likely to enroll in academies. Staff speculate about possible reasons: academies are perceived to be more demanding, African-American students find fewer role models in some of the academies, peers influence them to make other choices, and so on. The Health Academy has a stronger track record attracting African-American students, and several new academies have attracted higher percentages of African-American students. Despite these efforts, African-American, Latino, and limited-English proficiency students are over-represented in the general program, presenting a fundamental challenge to career academies as a reform strategy.

From the perspective of academy students, the academies do appear to represent a safer haven within the school. It is not uncommon to hear some academy students speak disparagingly about the general program's academics and atmosphere—and to acknowledge that their own chances of success are far greater in an academy.

Overall, it is hard to generalize about Tech's career academies. Significant differences exist not only between the first- and second-generation academies but also between the Health and Engineering academies and across the four newer academies. Over the next year or two, the school should gain a better sense of the new academies' viability—and whether they can improve student learning and postsecondary outcomes as well as the first-generation academies have.

Much of this will hinge on resources and support for developing academy leadership. Committed and talented teachers have emerged as the most important ingredient to academy success. Accordingly, a key to strengthening the newer academies lies in recruiting, training, and retaining directors and teachers.

The General Program

The expansion of academies at Tech has affected the role and identity of the school's "general" or "regular" program. Now that academies enroll at least half of Tech's tenth, eleventh, and twelfth graders, the balance has shifted. Students in the general program are less likely to be college bound, more likely to have attendance and disciplinary issues, and appear to be less likely to graduate from Tech. And, as noted, general program students are more likely to be African-American or Latino, even if several of the new academies have attracted representative numbers of African-American students.

Another notable distinction is that academy students spend most of each day in a particular part of the school, while most general program students have no geographic "home" per se at Tech. Nor do they have an affiliation with a particular group of teachers, which means they are generally less well known by Tech adults. However, all academy students also take courses with general-program students, making the boundaries somewhat more permeable than they would be if the academies were fully self-contained.

The general program resembles what U.S. high schools typically refer to as the "general track." While Tech has few AP courses outside of the academies or the Paideia

program, the general program does offer honors courses. Most students requiring special programs—such as bilingual education (18 percent) and special education (12 percent)—can enroll in academies as well and get scheduled into their support programs outside their academy courses. And both special education and limited-English proficiency students can mainstream into academies after the tenth grade. While Tech's whole school reforms (*see below*) have begun to change teaching and learning within the general program, this realm of the school has received less focused attention than either the ninth-grade program or the academies.

The growth of academies has affected general program teachers as well. As increasing numbers affiliate with academies, fewer teach exclusively in the general program. Many dedicated teachers still prefer to teach general-program courses, albeit for a variety of reasons. Some are specifically committed to general-program students; others prefer to teach a traditional schedule that does not require the additional commitments required of academy teachers. Except for the co-directors and several core teachers in each academy, however, academy/non-academy affiliations are less distinct than for students. All teachers meet in departments, engage in whole-faculty work and socializing, and see themselves as "Tech teachers."

Whole School Reform

The future and ultimate success of reform at Tech depend upon the extent to which such efforts change the experience of students across the whole school. Tech has launched a great deal of whole school reform activity in the last three years, grounded in grassroots, teacher-driven efforts that actually began years earlier.

Early Reforms

In the early 1990s, a number of Tech teachers began asking larger questions about how the school could better educate its students. How could teachers create more engaging curricula? How could Tech raise shared expectations for students? How could teachers collaborate more effectively to address these issues? As part of an accreditation process in 1991, the school had examined some sobering data showing that almost 50 percent of Tech freshmen did not make it to the twelfth grade at the school.[12] The data shocked the faculty and administration—and drove them to take action.

A group of reform-minded teachers began to discuss ways to leverage whole school solutions. These teachers came from across the school, including the Health Academy and the Paideia program. Calling themselves the "our school gang" and meeting at teachers' homes, they began to explore possibilities for reform at Tech. Their first priority was to create time in the schedule for conversations and professional development to take place. As a result of their efforts, in 1993 the school instituted a shortened Wednesday that allowed teachers to meet twice a month in the afternoon. At the same time, these teachers and others were actively seeking out new approaches: attending conferences and workshops, investigating the Coalition of Essential Schools and other reform movements, and discovering what was happening in the wider reform environment.

Through the early and mid 1990s, however, a succession of administrative leadership changes at Tech made it difficult to take build upon this groundwork. Then, in 1996 a bitter strike created significant divides across teachers in the district, and at Tech as well. It was the continuity of teacher leadership that kept reform efforts alive at the school. When Larry Todd became the principal in 1997, teachers were relieved to

[12] Tech's accrediting body is the Western Association of Schools and Colleges.

find a person in charge who was knowledgeable about reform, ready to support efforts in place, and eager to generate new ones.

Through this time, informal leadership of the school's reforms came from the cadre of teachers. Formal leadership came from the school's "Administrative Team," which in 1995 became the "Coordinating Council." Many of the teachers who had helped spur Tech's grassroots reforms served on this body at various points in time. Yet despite some changes—notably the creation of the Wednesday staff development afternoons—its leadership was inconsistent and ineffective. Teachers alternated between enthusiasm for reform and cynicism about actual possibilities.

Some of the problems were "technical": how to run an effective meeting, how to follow through on plans, how to build consensus. Other problems were more political. A tension throughout has been the degree to which Coordinating Council agendas—and thus the agendas for the Wednesday staff development meetings—have been administrator-driven versus teacher-driven. And some participants became pessimistic when programmatic or curricular results were often hard to see. Over time, teachers who committed significant amounts of time (at first unpaid, then paid) to reform burned out and became discouraged; attendance at the meetings began to drop.

Scaling Up Whole School Reform

While various teachers explored reform ideas and implemented important changes, the school also used its 1996 accreditation evaluation to drive more-intensive whole school efforts. In the 1996-97 school year, Tech received six-year accreditation—but with an interim visit after three years. The accreditation team highlighted challenges it would expect to see in several key areas:

- Improving ninth-grade student achievement and experience;
- Increasing the graduation rate;
- Better serving low-achieving populations (specifically, ninth-grade African-American, Hispanic, and Non-Chinese Asian-American students); and
- Providing equitable, school-wide access to technology.

At this time, the recently launched Bay Area School Reform Collaborative was offering sizable grants to schools that could demonstrate their commitment to a major reform agenda.[13] Tech's decision to apply for BASRC funding represented the school's first major commitment to concerted whole school reform. Melne Chappelle and Richard Fairly coordinated Tech's portfolio process and the preparation of the subsequent leadership proposal, which led to successful funding in the spring of 1998. The school used its accreditation recommendations to drive the BASRC proposal, which focused around strengthening the ninth-grade program (targeting African-American, Latino, and non-Chinese Asian-American students) and expanding the career academy program. BASRC money eventually went toward funding teacher leadership positions, reducing class size in ninth-grade English and math, conducting various professional development activities (conferences, site visits, action research), and paying for coaching from the Bay Area Coalition of Essential Schools and other support providers.

[13] Launched in 1995, the Bay Area School Reform Collaborative required schools to first apply for "membership," which involved the creation of a school portfolio. If approved for membership, a school then applied for leadership status, which came with funding for reform around a designated "focused effort." With leadership status, the school became accountable for producing results in student achievement and participating in an annual, peer-led Review of Progress. The rigorous criteria by which a school needed to demonstrate its capacity for powerful reform was hard for many high schools to meet, especially urban schools. Tech was one of the first urban high schools to receive leadership funding.

Focus on the Ninth Grade

Although Tech had struggled with its ninth-grade program before, the expansion of academies in the tenth, eleventh, and twelfth grades brought a new focus on the first-year experience. Student achievement was surprisingly low, attendance was down, and the school was losing many students in that first year. In the first marking period of the 1998–99 school year, over half of Tech's ninth graders had GPA's below 2.0. In general, the transition from more personalized middle schools to large high schools brings with it significant changes: more freedom, less adult attention, and new academic expectations. For urban students especially, high school increases young people's exposure to a range of distractions, threats, and temptations. All of these have presented serious challenges at Tech. In addition, as increasing numbers of students entered academies as tenth graders, the ninth grade became a kind of limbo period. Students were not connected with a particular sub-community at Tech, and too many were falling through the cracks.

In the 1997–98 school year, a team of ninth-grade teachers came together to address these issues. Tech subsequently decided to make its ninth-grade program the "focused effort" of its 1998–99 work with BASRC. Working with a school coach from the Bay Area Coalition of Essential Schools, the team pursued several interventions:

- Developing Summerbridge, a two-week summer program for targeted incoming ninth graders that was launched in the summer of 1998;
- Reducing class size in ninth-grade English, math, and English language development;
- Initiating Caring Connections, a mentoring program that paired targeted ninth graders with adults at the school;
- Getting teachers to review GPA and attendance data from the first marking period, with several parent meetings for ninth-grade students whose GPA's were below 2.0; and
- Forming ninth-grade action research groups among teachers to investigate curriculum development, attendance, and collaboration around working with similar students.

In the summer of 1999, Tech sent a team of teachers and administrators to a Bay Area Coalition School Change Institute, where they engaged in a cycle of inquiry around their ninth-grade data. The team learned to use various forms of data to develop a profile of student achievement, a challenge statement, a theory of action, measurable goals, and an action plan.

The resulting efforts have helped to structure a more cohesive program addressing the needs of ninth graders, pushing ninth-grade teachers to work more collaboratively. However, teacher transition, lack of common planning time, and the challenges of collaboration have made it difficult to sustain these efforts. Indeed, Tech has yet to see significant results in ninth-grade student achievement. Currently, the ninth-grade team is developing subsequent strategies and working to align changes more closely with their classroom practice. Some teachers are pushing for the creation of smaller learning communities in the ninth grade as a way to personalize learning and create effective interventions.

Additional Reform Grants

In general, the BASRC and Coalition of Essential Schools initiatives have helped Tech to focus its reform initiatives as well as to establish habits around data-based inquiry. This framework has enabled the school and its faculty to seek new grants.

Shortly after receiving BASRC funding, the school responded successfully to a federal RFP under the 21st Century Learning Center program. This grant has provided funding to create Renaissance Quartet, an after-school program targeting low-achieving students and involving parents and other community partners in its support system. The program links Tech to a cluster of its feeder schools—two middle and one elementary—to provide articulated services across the grade levels.

That same year, Tech became one of the first schools in the district to receive a Digital High School grant.[14] Because the aim was to integrate technology across the curriculum, Tech could use the funds as an opportunity to reinforce the BASRC grant by providing computers for the ninth grade and a variety of other instructional technologies.

Developing Teacher Leadership and Action Research

Beyond the programmatic focus on the ninth grade, reforms at Tech have had broad-reaching effects on teachers' work and professional development. Using BASRC funds, a key strategy has been to create formal teacher leadership positions. In the fall of 1998, twelve teachers received one release period a day to develop reforms in such areas as: curriculum coaching, new teacher support, ninth-grade team leadership, literacy, project-based learning, Digital High School, and school-to-career. This support has allowed the burden of reform leadership to be distributed across a wider group of teachers, providing much-needed time and compensation for reform tasks. No longer does a small clique drive reform at Tech, although an ongoing challenge has been to make teacher leadership efforts more coherent and better focused on a larger common vision and goals.

Another strategy has been to create various action research teams. In each of the last two years, teacher teams have voluntarily come together to pursue topics of common interest that address school change. These topics have included multiple intelligences, alternative scheduling, attendance, Internet learning, standards, academy scheduling, and the ninth-grade program. The teams generally meet once a month and use an action research process: they identify a problem statement, develop a work plan, review current literature, analyze site data, propose innovations to the school, collect data to measure effects on student achievement, assess effectiveness, and modify innovations as necessary. The teams have served both to drive programmatic changes and stimulate professional development.

Particularly effective was a team of ninth-grade teachers that focused on learning about multiple intelligences. The team reviewed literature, looked for evidence of multiple intelligences in their classrooms, experimented with different approaches to curriculum and assessment, and reported back to the school as a whole. Several teachers on the team report that they have "turned around their practice," and many others have become much more eager to join the collaborative teams. When Tech received funding to join the Secondary School Literacy Project of the Bay Area Coalition of Essential Schools, more teachers wanted to make the two-year-plus-summertime commitment than spaces were available. This project targets the teaching of higher-order literacy skills across disciplines. Using an approach to reading that emphasizes the development of meta-cognitive skills, it allows teachers across subject areas to discuss common issues of literacy and instruction, with a focus on serving low-achieving students. These teachers, in turn, learn to train and support other teachers in these strategies.

[14] Digital High School funds were federally granted and distributed through the California Department of Education.

"Teachers here are no longer just classroom teachers," says teacher-leader Elizabeth Lay. "When we're on committees or teams, we've generated them ourselves. There's now a lot of teacher-generated reform. That's the way we started, and we're back here now. Except we're much more sophisticated about how we work through the teachers."

Standards, Instruction, and Assessment

In the wake of the accreditation recommendations, Tech set out to strengthen its departmental curricular standards. The school developed a set of ten ESLRs—"expected school learning results" or graduation outcomes—that it would use across departments and programs to guide curriculum, teaching, and assessment. Time during the Wednesday meetings has been used by departments to engage with the state and district standards, articulate Tech's own version of these, and develop approaches to standards-based assessment. In addition, meeting time has been spent sharing approaches to portfolios, project-based learning, and examining student work.

In conjunction with a district policy, Tech instituted a system of "curriculum embedded assessments" in English in the 1998–99 school year. Used twice a year, this system allows teachers to gauge student progress on an authentic writing assessment. With Lay's help as teacher-leader and "literacy coach," teachers analyze data from these assessments and use it to adapt instruction accordingly.

Since 1999, when Tech became part of the Secondary School Literacy Project, a team of six Tech teachers has received training that it will use over the next two years to develop a repertoire of instructional techniques. A key component is building the capacity for the team members to train their colleagues and help take these approaches to scale within the school.

In addition, Principal Larry Todd has led Tech's efforts to become a pilot site for the district's "school-site empowerment" initiative that gives schools increasing control over decision-making and the use of funds. A committed group of teachers, administrators, and parents is in the process of creating a new system of school governance that will be designed to institutionalize stronger, site-based decision-making. Although these governance efforts have not yet focused on reforms, they have begun to address important problems around student attendance. In a district where myriad central-office policies have often undermined progress, such efforts will hopefully further Tech's push for deeper reform.

Achievements and Remaining Challenges

Overall, whole school reform efforts have enabled Tech to move beyond the changes instituted within the academy structure to impact students and teachers across the entire school. Although dramatic improvement in student achievement is yet to come, certain indicators do show positive results. GPA's have increased slightly, student scores on the curriculum-embedded assessments are up, and attendance is gradually rising. In addition, ninth-graders are less likely to drop out in that first year, are making more informed choices about academies, and are beginning to develop a sense of pride.

While whole school reforms have yet to significantly impact upper-level students in the regular program—at least in the way that academies have affected their students—the school's capacity to improve school-wide student achievement appears to be much stronger. Tech has a clearer focus in its reforms; teachers across the school are collaborating more effectively; the school is grounding its change efforts more clearly in student data; and more resources exist to serve low-achieving students.

That said, the state's changing policy context around accountability has presented new challenges for Tech—as for all public schools in California. Governor Grey Davis has instituted a plan that identifies low-performing schools and requires them to prepare an evaluation and intervention plan. In addition, the state has developed a school-ranking system based on aggregate SAT-9 scores (Stanford Achievement Test). The rankings guide the provision of incentives for schools that show large enough gains from year to year.

In February 2000, when California released the first school scores on the "Academic Performance Index" (API), Tech got only a "2" on a scale of 1 to 10, although it ranked a "6" relative to schools with similar demographics. To qualify for new support funds from the state, Tech must demonstrate at least a 5 percent gain in these scores.[15] Under this accountability system, Tech educators are wrestling with how to raise scores by using reform strategies that are designed largely to create more powerful, personalized, and authentic learning. The temptation is to "teach to the test," but many feel they have striven too long and too hard to abandon efforts that are just beginning to show results in student achievement—and that have had a clear impact on the school's professional culture.

Beyond the API are several important—and characteristic—challenges. The existence of so much funded reform activity has stretched leadership at the school and made it more complex to coordinate all the various efforts. The shortened Wednesdays also present problems: Who makes decisions about their use and how? Is the freed-up time to be used for teacher professional development or for whole school (i.e. administrative, district, and compliance) agendas? How can "administrative" agendas (e.g., the upcoming three-year accreditation review) be structured as professional development?

Some teachers have become more cynical as the acronyms and vocabulary associated with reform proliferate, as do the number of external coaches and consultants. Compared with the earlier days, when reform was essentially a grassroots effort, it has become quite complex, subject to diverse external accountability requirements, and, at times, somewhat top-heavy.

Many at Tech point to the debilitating effects on reform of high teacher turnover in the last several years. Many Oakland schools (and urban schools in general) have experienced such transitions, yet it seems to wreak particular havoc on larger schools undergoing complex reform efforts.

Although many Tech teachers work in particular niches (academies, programs, departments), their commitment to whole school issues has been deep—and unusual for a school of 1,700 students. However, the strains of a decade of reforms have also taken their toll on teachers. For a number of years, the lack of clear leadership, facilitation, and effective collaborative processes all undermined teacher commitment. More recently, Larry Todd's vision and commitment to teacher leadership has brought much-needed support to change efforts, yet the accumulated strain and complexity have worn thin the teacher efficacy so necessary to reform. Teachers find themselves alternately motivated and hesitant to commit their energies to "whole school" involvement and leadership around "macro" issues versus dedicating themselves to more micro-level academy, team, or individual efforts. For some, it has

[15] Actually, the state has set a standard (800 on a scale of 200–1000) that all schools must aim for. The state will reward schools that achieve the "growth target" (5 percent of the difference between the school's score and the standard of 800).

become difficult to justify the time, collaboration, and politics involved in efforts beyond their own classrooms or programs—especially if the results are not always clear.

The shifting district context has also impacted reform. Tech is one of several schools piloting the district's initiative in site-based decision making. This has required Todd to devote significant time and attention to negotiate with the district around focus areas and help build a team for the initiative. In addition, Oakland Unified has been going through a state audit, so it has tightened school accountability measures and reporting requirements—all of which take valuable time away from school site issues.

Beyond all these factors, the day-to-day difficulties of teaching and running an urban high school weigh heavily on everyone. At times, students walking the halls during class time, incidents of discipline and violence, the challenge of engaging young people in the classroom, and a student population facing many serious obstacles to academic achievement all combine to make reform seem utopian. As veteran teacher remarks, "The energy needed to deal with the basics has gone to reform—and we're still struggling with the basics!"

Academies and Whole School Reform: Complementary Efforts and Missed Opportunities

Standing back to look at the evolution and impact of Tech's career academies and various whole school reforms, a picture emerges of dynamic and complicated school change.

In some ways, the work of academies and the processes of whole school change have proceeded along parallel tracks, rather than benefiting from the strengths of one another. For example, some powerful school-to-career approaches have emerged within the academies, but these have not carried over to the general program or to the creation of a school-wide vision. Similarly, data-based inquiry has helped the ninth-grade team and others to generate bottom-up reflection, planning, and change, but this technique has not made its way into the academy teams, where more focused uses of data and inquiry might provide powerful tools for change, especially for the newer academies. Further, questions have emerged about the extent to which the various whole school reform efforts have enabled the kinds of discussions and work that actually improve teacher practice. The most powerful collaborations among teachers have been within certain academies and in several of the action research teams. As in many larger schools, these professional sub-communities have been difficult to scale up.

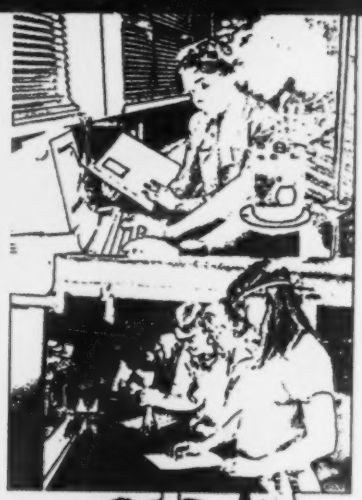
In many other ways, though, the diverse reforms have complemented one another. Academy teachers have played key roles in leading reform initiatives and shared governance. The success of the original academies brought a sense of pride and accomplishment to Tech that helped convince others that all students could be supported to reach high academic standards. And, in turn, action research and teacher leadership have helped the newer academies develop their own programs and approaches to teaching and learning. The whole school efforts have also helped keep Tech's faculty united around common purposes and tasks at a time when the expansion of academies might have balkanized the school.

Tech is striving to develop the appropriate forums and structures within which to continue such discussions. In the meantime, the hope is that the successes will take root and become engrained in the school culture—and thus less vulnerable to the many internal and external pressures that tend to undermine such efforts. As funding for some initiatives expires (e.g., from BASRC), Tech will need to institutionalize some of them and look for new ways to support the beyond-classroom work required of schools engaged in deep reform.

As it stands now, Tech's successes demonstrate that deeper change *is* possible in large urban schools. Without underestimating what that takes—or flinching from the inevitable setbacks along the way, real progress must be celebrated. The odds against a school like Tech are considerable, and significant improvements in student achievement and equity are hard-won victories. Looking at its 15-year accumulation of incremental changes, significant shifts in school culture, and the very real capacity to deepen and sustain this work, Tech offers much reason to be hopeful—and a guide to what remains to be learned about creating urban schools that effectively educate all young people.

Brighton High School
Boston, Massachusetts

Reinventing High School: Six Journeys of Change



A Case Study of Brighton High School
Boston, Massachusetts

On the Cutting Edge of District Reform

By Lili Allen

In a high school library, teachers and administrators sit around a long table. Half-empty coffee cups and stacks of papers litter the surface. The final bell has just rung, and the group is getting down to business. It is Monday afternoon, and Brighton High School's Change Team—teachers and administrators who volunteer to lead the school's reform efforts—is using its weekly meeting to hammer out plans for new career pathways in the coming year.

"I like the proposal you've put on the table, Charlie," says one teacher. "But three periods a week of common planning time! If we're not careful, everyone will see it as a waste of time."

"That's why I like the idea of looking at student work during one meeting," says another teacher. "But we'll have to figure out how to encourage people to bring stuff in—remember how hesitant everyone was during the training?"

"That will be part of the job of the pathway facilitators," argues the assistant headmaster. He laughs. "We're going to have to crack the whip." More seriously, he goes on, "If we can make it comfortable for people to share the work their students have done, they'll do it. The Annenberg coaches could help, too. Maybe we should plan for them to help facilitate some of those meetings."

This seemingly mundane conversation signals a remarkable change at Brighton High School, one of sixteen comprehensive public high schools in Boston, Massachusetts. The faculty gathered around this table are determining how to structure time—arguably the most critical and contested resource in a school—so that teachers can focus on critical issues of student learning. It is too early, in this story's time frame (1998–99), to claim equally dramatic school-wide changes in student outcomes resulting from restructuring—but the school has laid the critical foundation by changing how teachers conduct their professional work.

Brighton High School is a large, Gothic structure that sits on a hill in a working-class neighborhood. In demographic terms, it's what one staff member calls a "typical urban school." The approximately 1,000 students reflect the diversity of Boston, with its large immigrant population. Under Boston's controlled-choice plan, students can apply to any high school in the city, with acceptance contingent on racial balance. The large number of students who leave their homes in far reaches of the city at 5:30 a.m. to arrive at Brighton High by 7:15 is testimony to the school's good reputation.

Walking into Brighton High School, a visitor is struck by how quiet the hallways are during class periods; even when classes change, students noisily pass up and down the stairs with little of the shoving or other annoyances that a newcomer to urban schools might expect. There is a sense of calm and respect among teachers, students, and administrators—a tone set by former headmaster Juliette Johnson, a no-nonsense administrator who speaks in soft, measured tones. Her recent replacement, Charles Skidmore, had been Johnson's highly respected and well-liked assistant headmaster.

Brighton High School is in the midst of a set of changes that have their roots in community and district policies initiated decades ago but that are also, in many ways, on the cutting edge of reform. In 1998–99, after years of steady growth of its school-to-career initiatives, all of Brighton High reorganized around school-to-career principles by moving to school-wide career pathways. The story of the school's progression to this moment resides not only inside the school walls but also in the school district and in the community institutions that surround and support the school.

The Brighton story is one of a forward-thinking school that has both capitalized on and helped shape community and district practices. Throughout the 1990s, Brighton took advantage of opportunities offered by the district and community partners to structure new kinds of learning opportunities for students—and it also played a leadership role in ensuring that the district did its part to make these changes workable. Brighton has been both "learning lab" and leader in Boston's citywide high school reform effort. In the long run, we can look to Brighton High School to help us understand a pressing question facing high school reformers: If a school moves from one or two successful career pathways to a whole school model, will student achievement rise across the school? Can small, successful programs be harvested for school-wide successes?

In 1998–99, the focus year of this story, Brighton High faced difficult decisions about how far and how fast to change. Because of groundwork laid over the previous decade, as well as more recent decisions, the change process was less wrenching and disruptive than it might have been. At the same time, the school faced significant challenges on several fronts. The roles of teachers and administrators were changing, in some cases dramatically and in ways that required new collaborative relationships among staff. New pathway structures cut across the traditional organization of faculty into academic departments. At the same time, new state-level assessments required broad content-area coverage. Teachers and administrators alike felt the tension

between subject matter affiliation and the need, especially for newly formed pathways, to create their own strong curricular and programmatic identities. Finally, while Brighton's incremental approach of rolling out structural changes over time was designed to make faculty feel comfortable with the changes, the school risked exhausting even the most ardent supporters with ever-new school configurations. This case study explores some of the ways in which Brighton High School's approach to change mitigated some of these tensions and identifies some of the challenges that remained by the end of the school year.

A Decade of Momentum

Whole school change at Brighton High School is grounded in reforms initiated decades ago. In 1982, business leaders, higher education institutions, and the Boston Public Schools created the Boston Compact, an historic community agreement to improve the educational outcomes of students. Revised several times since then, the Compact has formed the backbone of a community-wide commitment to improve and expand learning opportunities for young people in Boston. Implementation of the Boston Compact has rested with the Private Industry Council (PIC), which, in Boston, has become a forward-thinking employer association engaged in youth and adult education and workforce development.

Initially, the agreement held the business community accountable for providing employment for high school students, while the school system was responsible for improving students' test scores, attendance, and dropout rates. It was the 1994 Compact (Compact III) that moved employers beyond support and advocacy to more intimate involvement in the educational process. In this Compact, employers pledged to promote a school-to-career system that would extend the classroom to worksites and to implement structured worksite learning experiences that would complement academic work in school. The PIC furthered this vision with staffing: by placing school-to-career coordinators in four of the city's high schools—including Brighton—that were identified as having the most interest and capacity to move forward on creating and deepening career pathways and increasing the use of project-based learning in the classroom.

The following year, the Boston Public Schools (BPS) signaled its support of school-to-career by assuming the salaries of the school-based coordinators in the district budget. The school system also developed a new high-level leadership position—STC Director—to oversee the coordinators and to advocate and organize the adoption of school-to-career structures and pedagogies throughout the city's schools.

Brighton was one of the first high schools to take advantage of community and district support for school-to-career, and by the time the school received funding for its STC coordinator, it already had a strong school-to-career program. In 1990, in collaboration with nearby St. Elizabeth's Hospital, Brighton High had created the Medical Industries Collaborative, one of the first "career pathways" in the system. The collaborative clustered students in two science and career-related courses, and they participated in internships next door at St. Elizabeth's Hospital. These students also had been among the first to participate in ProTech, launched in 1991 by the Private Industry Council, and PIC staff—"career specialists"—supported them with internships that featured work-based learning plans. As the PIC's flagship, multi-year youth apprenticeship program, ProTech quickly became the "Cadillac" model of work-based learning, inspiring many other pathways across the system and, indeed, the direction of Compact III.

Throughout the decade of district-wide scale-up of school-to-career, a key BPS strategy has been to designate a small number of schools as pilot, or flagship, schools, as a means to target resources effectively and learn what building a school-to-career system involves. Brighton High School has consistently been among the front-runners in this process. In 1996–97, as a designated Flagship School, Brighton High School launched the School of Business Services pathway to accompany its medical sciences pathway, and in 1997–98, it was one of only two schools to launch a pathway to introduce young people to careers in education. Throughout these years, with assistance from Jobs for the Future and other outside collaborators, teachers began experimenting with project-based and inquiry-based approaches to instruction, teachers and administrators worked on developing their leadership skills, and the coordination of efforts among internal and external partners was underway.

Specifically, both pathway and non-pathway teachers have attended intensive workshops on project-based teaching techniques, followed by on-site, classroom-based coaching and technical assistance on implementing projects in their classes. Teachers have learned to probe for understanding, using what Boston calls a "key questions" strategy, and they have also learned to develop exemplary student projects that illustrate how students could meet new learning standards for core subject areas through a school-to-career approach. These teachers, organized and supported by the STC coordinator and external coaches, have showcased their students' work in schoolwide exhibitions. This, in turn, has helped to spawn interest in these pedagogies among more traditional teachers.

Peanuts in Outer Space

How will humans produce their own food in outer space? This question poses a real dilemma for NASA scientists; it is also a challenge that eleventh-grade chemistry students confronted in one of the Brighton High School's early forays into project-based learning.

Under the direction of teacher Russ Cook, students entered into a collaboration with Tuskegee University, a predominantly black school in Alabama, to explore ways to grow nitrogen-fixing crops, such as peanuts and sweet potatoes, hydroponically—that is, in a water-based medium.

Students were involved in preparing the hydroponic solution, germinating the plants, setting up computer programs to analyze data, maintaining electronic and other communication with Tuskegee, and developing systems to ensure the project's smooth running. In addition to providing a powerful vehicle for students to learn a wide range of academic and "soft" skills, the connection with Tuskegee provided students with real adult role models in the scientific community.

What did students think about the project? They talked about it with genuine enthusiasm. "It's better because it's hand-on," one student explained. "You're learning, not regurgitating. We're becoming more analytical, learning leadership, teamwork, integrating different subjects, like algebra, biology, English, physics."

While Brighton teachers experimented with new pedagogies, the Boston Office of School-to-Career partnered with the Private Industry Council and Jobs for the Future to collect and disseminate data on the performance and engagement of students in career pathways. School-to-career coordinators used this data, which showed positive effects for involvement in school-to-career programs, to build support for pathways

within the lead schools. Jean LaTerz, Brighton's school-to-career coordinator, was one of the first to take advantage of this data, both to target appropriate services to struggling career pathway students and to share positive outcome data with non-career-pathway staff at the school. She held weekly "teacher coffees" where she would accompany the bagels and coffee with displays of school-to-career students' work, statistics on college acceptance rates and other outcomes, or demonstrations of students' skills, such as blood pressure checks by students in the health pathway.

In the most recent citywide effort to reform Boston's high schools—given direction by a High School Restructuring Task Force—Brighton once again stepped up to the plate to become one of the lead high schools. Launched in the fall of 1997, the Task Force, a collaboration between the Boston Public Schools and the Boston Teachers Union, developed recommendations and guidelines for significantly restructuring the city's high schools. The Task Force was the product of an unprecedented agreement to embark in tandem on significant high school reform embedded in new teacher contract language, and it consisted of members jointly appointed by Superintendent of Schools Thomas Payzant and the union's president, Edward Doherty. The membership drew upon many sectors of the community—teachers, parents, administrators, and community-based organizations—and was supported by a small "Resource Group" of educators that prepared materials and agendas for Task Force meetings. The Task Force included several members who had been closely involved in piloting school-to-career structures and pedagogies in Boston high schools, including high school teachers, Neil Sullivan of the Boston Private Industry Council, Bill Spring of both the Boston School Committee and the Federal Reserve Bank, and Kathi Mullin of the Office of School-to-Career.

As one of only two headmasters on the Task Force, Juliette Johnson articulated Brighton High's experience with school-to-career initiatives and strongly influenced the Task Force's conclusions and recommendations for action. In addition to championing the success of pathways, Johnson used this forum to raise district-level issues that affect a school's ability to institute changes. For example, she successfully advocated for transfer policies that would abate the non-stop flow of incoming and exiting students throughout the school year, and she encouraged the district to address the disciplinary problems that can arise when students transfer in from court-mandated settings.

The Task Force report, released in the spring of 1998, outlined a far-reaching set of criteria for reforming high schools that clearly reflected Boston's unique community partnership codified in the Boston Compact. Beginning in 1998, the school district charged all Boston high schools with engaging all school constituents in a significant restructuring process that encompasses ten "key practices" (*see box next page*).

While every Boston public high school would engage in comprehensive restructuring, the Task Force report offered two timelines for reform. In addition to a deadline for all schools, schools could apply for fast-track, "Option One" designation by writing a proposal detailing their reform plan and specifying which significant aspects of the reform agenda they would implement in the fall of 1998. Because of the groundwork laid over the previous decade in developing school-to-career as a model for restructuring, and the unusual and well-constructed alignment between BPS and the PIC, all five schools selected for Option One status proposed some variant of the school-to-career model. Like Brighton High School, most opted to cluster students into career pathways; others would combine career pathways with offering school-to-career courses as senior year electives.

Practices for High School Restructuring in Boston

1. **Benchmarking Curriculum to High Standards:** Schools must align curriculum with citywide standards and eliminate low-level courses, and all students are expected to meet the same high standards regardless of the small learning communities they select.
2. **Ensuring Effective Instructional Practice:** Teaching practices must focus across disciplines on literacy, applied and inquiry-based learning, and the use of problem-solving strategies.
3. **Implementing Multiple and Ongoing Assessments:** Students should be assessed through a range of measures such as collaborative assessment, portfolios, exhibitions, and competency-based graduation, and these assessments should be used to give immediate and useful feedback to teachers.
4. **Creating Small Learning Communities:** The large, impersonal high school must divide into smaller learning units, with a group of teachers responsible for a specific group of students. Options include school-within-a-school models, academies organized around a particular theme, career pathways, or multi-grade or single-grade clusters
5. **Flexible Use of Time:** Alternative schedules, such as block scheduling or extended-day, make it possible for teachers to participate in common planning time and students to participate in inquiry-based instruction and student advisories.
6. **Reduced Student-Teacher Ratio:** This can be achieved through alternative scheduling, course integration, reallocation of resources, inclusion of special populations, and engagement of all professional staff in teaching.
7. **Extending the Classroom to the Workplace and the Community:** In collaboration with business and community partners, high schools should structure outside learning experiences, such as work-based internships, community service learning, and field-based projects connected to academic instruction.
8. **Creating a Personalized and Respectful Learning Environment:** Schools should have clear codes of safety and discipline and should be organized to provide support services, such as advisories, mentoring, and health and social services, to ensure that all students can achieve high standards.
9. **Developing and Sustaining a Collaborative Professional Culture:** Teachers must have opportunities for professional growth through ongoing coaching, developing curriculum, participating in study groups, and team-teaching.
10. **Building Partnerships: Family, Community, Business, Higher Education:** Schools must develop strong partnerships with all sectors of the community to support student learning. Parents may be engaged in supporting learning at home or in school decision-making, business may be engaged through financial and technical assistance or mentoring, and higher education may be engaged through changes in college admissions, tutorial and mentoring support, and collaboration on curriculum.

From the Boston Public Schools/Boston Teachers Union High School Restructuring Task Force, June 8, 1998

Debating Full-Scale Pathways

Brighton High's primary administrative vehicle for moving toward full-scale pathways was its Change Team. Consisting of about 15 administrators and teachers from throughout the school, its task was to advise the headmaster. Created in 1996, this group had been organized by a "school coach" that Brighton obtained through a grant administered by the Center for Collaborative Education (a Coalition of Essential Schools regional center). The Change Team's legitimacy in the school is enhanced because it is voluntary (its members meet "religiously" every Monday afternoon, without pay) and is open to all faculty.

Over the last several years, members of the Change Team have, individually and collectively, spearheaded and facilitated formal and informal conversations on restructuring issues, through venues such as department meetings, pathway common planning time, parent meetings, and a school-wide "Information Fair." And when the time came to prepare an Option One restructuring plan, the existence of the Change Team placed Brighton in a unique position. The headmaster turned to the team to develop the plan, present it to the faculty, and gain faculty support for the school-to-career model.

During this time, the inclusion of a broad cross-section of the school was critical in the conversations about school change. "There were lots of opportunities for people to be involved," according to one teacher. "By the time we voted, it wasn't the administration presenting a fully developed package to a faculty that had never heard of it, but the Change Team presenting to school staff who had debated these ideas over the course of the year." After partnering with the Private Industry Council to investigate areas of economic growth in the Greater Boston, the Change Team proposed the creation of two additional pathways (Law and Government; Media Arts and Communication) to accompany the existing three (Health Careers, TeachBoston, and Business/Technology).

The restructuring plan called for each of Brighton's five pathways to be a semi-autonomous small learning community. Entering ninth graders would select one pathway and then be clustered with other students in that pathway for all of their major courses (math, science, English, and social studies), along with a pathway-specific career-related course. Students would mix with other students across the school for other courses, such as physical education and foreign languages.

The school made a philosophical commitment to offering students as much choice as possible. "If a student participates in a different pathway every year, and opens herself up to all those exciting and different learning opportunities, I consider that a success," says Johnson. This opened the school to future hard decisions about whether to turn students away from oversubscribed pathways or to curtail the selection process, maintain stable staffing levels, and create a feasible master schedule.

Each faculty member also had to make a choice. After the spring 1998 vote to divide the entire school into pathways, each faculty member indicated a pathway preference. Based on these requests, teachers were assigned to one pathway as their primary home. An administrator was assigned to each pathway as the pathway facilitator. The facilitators spent the summer of 1998 developing curricula for new career competency (career-related) courses.

During the 1997–98 school year, the primary question facing Brighton High staff, as they debated the move to pathways as an Option One school, was whether the well-documented success of students in ProTech's health careers and business pathways was due to the "specialness" of the program. To enter ProTech, students had to have a C average, 90 percent attendance/punctuality, and a successful interview with a

teacher/employer team. Other pathways had open enrollment, although ProTech and non-ProTech pathways both expected students to maintain a C average and a strong attendance record to remain in good standing and become eligible for work-based learning placements. An added boon was that pathways teachers volunteered to participate in the program, which meant that they were enthusiastic about the opportunity. Students in career pathways across the system had significantly lower dropout rates, higher attendance rates, and better grades and promotion rates than their non-pathway peers. Would the success be diluted if the school expanded pathways across the school and were no longer able to control standards for student retention, or the enthusiasm of participating teachers?

According to a staff member, there was a feeling that "we have to try something" in the face of discouraging data on student outcomes of Brighton's non-pathway students. "We didn't need to look at test scores or see the attendance data," said one teacher. "Our students weren't showing up, and they weren't achieving." Said another, "Although some staff were skeptical about whether pathways could make a difference, we weren't proud of our statistics. We knew we had to change." A more disaffected teacher suggested that "there never really was a choice. It was only a matter of time before this school headed in this direction," referring to the school's long history of developing school-to-career pathways.

When the teaching staff voted on the Change Team's restructuring proposal, 74 percent came out in favor of restructuring into pathways across the school. It is unclear, though, to what extent this vote reflects a solid endorsement of the pathway concept or a willingness to entertain change provisionally.

A Dramatic Change: Common Planning Time

In 1997–98, while preparing for the roll-out of restructuring, Juliette Johnson and the Change Team made two critical decisions that have greatly influenced how the teaching staff has viewed the reforms: to emphasize teacher common planning time and to have administrators manage the pathways.

As any administrator of a large school knows, the master schedule is the "black box" of school reform. Master schedules are incredibly complex; one Boston teacher has described the school schedule as "a five-dimensional algorithm." While Brighton's school administration envisioned that the pathways would cluster students for their core courses, it decided in the first year to attempt only partial clustering (in a common competency course and at most one or two other courses). Instead, the focus that year was on scheduling so that teachers could meet together frequently with colleagues in their pathway to develop its identity and curriculum. The goal in future years would be to ensure that each pathway would have common students as well as a common set of teachers.

The primary result of the decision to start with common planning time for teachers was that teachers could "see and feel" the difference that restructuring would make for their work. With planning time scheduled for three periods per week, teachers could be professionals, meeting to discuss issues of student learning and engagement. In interviews, almost all teachers cited common planning time as the single most significant change in the first year of restructuring. One teacher described it as "revolutionary." "People are all pulling in the same direction," according to another person affiliated with the school. However, some teachers resented the sharp increase in meetings; one teacher took an opportunity to teach an additional class in order to remove himself from what he considered a waste of time.

A Day in the Life...

Makeisha arrives at school at 7:30 in the morning after two bus rides across the city from her home in Boston's Mattapan neighborhood. She joins other students from her health pathway in homeroom, where Mrs. Garada leads a short check-in on their reports on their internship placements, due that Friday. Makeisha isn't worried; she interviewed her supervisor and another colleague last week and wrote her report on their career paths over the weekend.

Makeisha stays with her pathway peers for anatomy and physiology and for her class on health professions, then joins friends from all across the school for Spanish and gym. Her final class, English, is with her pathway again; they're writing another draft of papers they started a month ago.

Her school work finished for the day, Makeisha jumps on a cross-town bus and heads to Beth Israel Hospital, where she works in the radiology department. "I've watched lots of x-rays and even saw a little baby on an ultrasound. My supervisor is letting me practice on her—she lets me try to find her liver and her kidneys."

"I like this pathway, because I think this is what I want to do in the future," she says. "I'm thinking of going into medicine. I tried the business pathway, but I realized after doing the internship that I don't want to spend my days with computers and numbers. It just wasn't me!"
Makeisha has little patience for students who don't take advantage of what pathways have to offer. "Some of them wish we didn't have pathways, because they have to work harder. They can't get away with just coasting any more—they have to focus. But I prefer it. It's good experience."

Common planning time was designed to focus on case management during one day per week, and on teaching and learning two days per week; in all but one pathway, this protocol has been followed. Several people familiar with all the restructuring schools in Boston commended Brighton High School for maintaining this design throughout the first tumultuous year of change, perhaps due to the presence of school coaches funded by the Annenberg Challenge. During case management meetings, the Student Support Service Coordinator, the directors of the Special Education and Bilingual Programs, and pathway guidance staff attend as needed. Staff identify and discuss students who are struggling, and they determine actions, such as counseling, course changes, or disciplinary action, to address the student's issues.

Those whose names reappear and who warrant further attention are referred to the Student Support Team, which can make recommendations for staff action. For example, the Student Support Team helped staff of one pathway to understand that a particular student needed firm, consistent limits; the staff had thought she was "fragile" due to outside circumstances and needed some leeway in completion of course work. In another pathway, however, a teacher complained that he never got any feedback on students referred to the student support team.

To some degree, the case management approach has had less impact on students than it might have if the teachers at the meetings together shared all of their students, instead of just some. For example, students who are discussed in pathway meetings are not necessarily students of all teachers in that pathway. Still, most staff interviewed for this case study agree that the emphasis on case management has been important in focusing the staff to look at students' academic, social, and behavioral needs as a whole.

Similarly, the effort to direct the other two weekly common planning meetings toward issues of teaching and learning has "changed the conversation" among staff at the school. The school coaches, funded by the Boston Annenberg Challenge, attend each pathway meeting and help facilitate the discussion. These meetings are spent on several activities: 1) developing pathway "signature" projects, for completion in the pathway competency courses; 2) preparing teachers to assist students to achieve on the Stanford 9 and MCAS[1] tests; and 3) looking at student work to develop a common set of criteria for competent reading and writing skills. Unfortunately, teachers remain limited in the interdisciplinary projects they can undertake because pathway students are not fully clustered for all of their courses.

During the weekly meeting devoted to looking at student work, the teams use protocols and rubrics introduced by the Annenberg coaches. Once again, not all student work examined during the allotted time is the work of students who are common to teachers in that pathway, but the emphasis on looking at student work has caused many teachers to try, or consider, different teaching strategies.

Teachers agree that the common planning time focused on teaching and learning has been the locus of some of the most productive, as well as the most contentious, conversations. As one person affiliated with the school puts it, "The conversation around teaching and learning can bring out the best in teachers, or it can bring out their worst fears: 'am I a bad teacher?'" In some pathways, the Annenberg coach managed to use the process of looking at student work as a way to encourage even the most traditional teachers to consider different teaching strategies. Teachers in one pathway devoted multiple meetings to analyzing serial drafts of a student's work, discussing what the teacher did to scaffold the work and help the student move to a final draft. In another pathway, the pathway facilitator feels that the staff can now lead themselves in the process of using student work to promote conversations around effective pedagogy.

In other pathways, teachers have complained that they felt "talked at" by outside facilitators and that the introduction of new teaching strategies, at a time of massive restructuring, has been overwhelming. Teachers in one pathway avoided substantive conversations about teaching and learning for several months, perhaps in part because the staff were uncomfortable with exposing their practice to others. In a worst case scenario, a teacher who volunteered to bring student work to a pathway meeting was treated poorly by another teacher, who rather roughly critiqued her presentation of the lesson. The interchange had a chilling effect on sharing within the group.

Brighton High School teachers face the dilemma of teachers across the country, who must manage simultaneous mandates to prepare students to meet testing requirements while combating student disengagement by making education more relevant. Teachers have felt confused about the simultaneous focus on literacy across the curriculum (a major district initiative in 1998–99), the MCAS (which emphasizes content knowledge in English, history, science, and math), and the applied-learning and cross-cutting competencies called for by the move to pathways. This confusion emerges in the plea by some faculty for more focused professional development. "The coaches had teachers trying to do Bloom's Taxonomy, which was much too complicated.[2] People tuned out. The school needs a simple, straightforward, consistent staff development approach that all staff can agree on and buy into."

[1] Through the Massachusetts Comprehensive Assessment System, all students are assessed in grades 4, 8, and 10 and must pass the 10th grade assessment to graduate from high school.

[2] Bloom's Taxonomy is a method of analyzing and developing students' literacy skills.

At the same time, the focus on teaching and learning has facilitated changes in student outcomes that many of the staff have found exciting. For example, the Annenberg coaches analyzed the MCAS and Stanford 9 tests to determine what literacy skills are assessed, then worked with teachers to include more reading and writing in the curriculum. Teachers also have used common planning time to develop key questions for the mid-term in each of their classes. Coaches and teachers were excited about the quality of student work generated through these activities and the prospects for more strategically targeted literacy assistance as a result.

In addition, with the move to pathways facilitating the development of community partnerships, it is the common planning time that has made it possible to begin to integrate those partnerships into the curriculum. For example, when the law firm Burns and Levinson approached the Private Industry Council about developing a relationship with a school, the PIC made arrangements for the firm's representatives to visit a common planning time of Brighton's Law and Government pathway. What followed was a new kind of partnership for the school. Rather than simply creating student internships, Burns and Levinson invited pathway teachers to visit its offices and shadow lawyers to learn about the firm's structure and organization. Together, teachers and lawyers developed a mock trial activity for the students, and the staff from the firm joined the school's push for higher test scores by regularly attending tenth-grade classes to coach students on test-taking strategies in preparation for the MCAS. Because the partnership began with a conversation with all members of the pathway team, the partnership moved well past the bounds of traditional internships and into meeting the students' needs beyond job exposure.

Similarly, what might have been a one-shot field trip became a long-term project with the *Boston Globe* on the impact of technology on journalism. Common planning time enabled teachers in the Media Arts and Communication pathway to do extensive preparation of both *Globe* staff and Brighton students for several activities: a visit to the newspaper plant, guest speakers in the school, follow-up interviews, and the creation of a school newspaper issue devoted to the topics of technology and diversity.

The use of common planning time to change the relationship between teachers and outside partners has not been uniformly successful, though. In the health pathway, when asked to visit a hospital to understand what work students were undertaking as part of their internships, some staff questioned the need for such a visit: "We all know what a hospital looks like," said one teacher.

A New Student

"When I came to Brighton High School in eleventh grade, I didn't know anyone. I was so glad to be in the TeachBoston pathway. It really helped me get to know other students," says Danielle, now a senior.

"I did my internship with Rosa," she remembers. "It seemed like we'd learn something in class, and the next day we'd use it in the internship. Or we'd see our supervisor, the fifth grade teacher, do exactly what we were learning. It was weird.

"Rosa and I both loved the internship. It was like we didn't have a choice: we had to learn this stuff so we could teach! I had to learn to communicate better. Rosa and my teacher helped me figure out how to make a lesson interesting, how to listen to the kids. Rosa is a natural; I had to work at it. I learned a lot about myself.

"Next year? College, for sure. I hope I get in to Boston College because they have a good teaching program. A lot of kids from my pathway want to go there. It'll be nice to go to a school already knowing a bunch of people."

Clustering Students

Two structural changes made in the 1999-2000 school year support a fuller clustering of students within pathways. First, there are now four pathways instead of five; Law and Government and TeachBoston have been combined due to under-enrollment in the latter. Second, Brighton has instituted a separate ninth-grade cluster for all freshmen, in response to a district-wide mandate to support the transition of students (especially those under-performing on the system wide standardized tests) from the middle grades to high school. The pathways have become grade 10-12 programs. Many faculty believe that this will help students make well-grounded decisions about which pathway to enter.

Brighton High's gradual progress toward clustering tenth through twelfth grade students for all of their major courses presents new opportunities and new challenges. On the one hand, teachers can experiment with interdisciplinary projects that reflect the pathway theme, and each pathway is freer to develop a more distinct "identity." On the other hand, students indicate that they enjoy the opportunity to interact with students from other pathways during some of their class periods. They suggest that some electives, such as foreign languages and physical education, should be integrated classes with students from all pathways. As Juliette Johnson has noted: "We're a family here. The school is not so large that we need to divide into totally separate schools."

A remaining challenge is the involvement of limited English proficient (LEP) students in pathways. Schools with small learning communities face the dilemma of determining how best to allocate their limited number of bilingual staff across the pathways to meet the needs of students who are partially mainstreamed.

Although Brighton High was one of the first schools in the country to extend its pathways to LEP students, it is struggling to provide adequate staff to the newly expanded pathway programs. Before moving to full pathways, the school had offered two parallel, native-language pathways in health and business. Minority language students took the same competency courses as their mainstream peers and participated in job shadows and other work-based learning opportunities. Brighton also began a Dual Language Health Careers program, through which English-language and Spanish-speaking students take competency courses simultaneously and meet together for projects.

However, the move to school-wide pathways has made staffing these specialty initiatives even more difficult. Because bilingual students have the same options as every other student in their choice of pathways, they are scattered throughout the school. Providing native-language teachers for competency courses has been nearly impossible. In addition, Brighton lost its Vietnamese program to another high school because its numbers dropped. Consequently, the bilingual program lost ESL teachers, who would have served both Spanish- and Vietnamese-speaking students. If the school still had a large concentration of students in its bilingual program when it moved to full pathways, it would have the flexibility of a large bilingual teaching staff to mitigate the scheduling dilemmas.

This situation is complicated by the fact that the changing demographics of Brighton's student population are creating a need for different educational services. Students from other countries are now entering the Boston Public Schools with less formal schooling; students who are not literate in their native language require far more academic assistance, for longer periods of time, than do students who have learned to read and write in their native language. According to Carmen O'Connor,

Brighton's bilingual department head, approximately 40 percent of students with the lowest literacy are in eleventh and twelfth grades. "We used to get students who could jump literacy levels and be mainstreamed pretty quickly," she says. "Now we're not seeing that." These older students, who would benefit from hands-on, relevant coursework, are less likely to be placed in career-related courses because they must focus their time on gaining basic literacy skills.

Thus far, bilingual staff have been attending common planning time with pathways with which they do not necessarily share common students or curricula. Nevertheless, it has been important for them to be a part of the schoolwide focus on teaching and learning, and they have assisted pathway teachers in appropriately addressing the issues of bilingual students in the pathway. The move to a separate ninth grade cluster and to four pathways is facilitating the deployment of bilingual staff across pathways because there are fewer pathways for the bilingual department to staff. Still, the bilingual department head struggles to find time for her bilingual team to meet as a group to manage the process of helping students to progress more quickly towards the mainstream. The cost has been high to her and her staff: while the school moved forward with restructuring, they often felt as though their concerns about adequately serving limited English proficient students were secondary.

Pathway Administration

Another ongoing challenge as Brighton High rolled out its reforms has been the management of the pathways. When the pathway structure was first established, the Change Team decided to make administrators responsible for managing the pathways. Pathway facilitators work with the Private Industry Council to develop and manage new partnerships and to develop appropriate work-based learning activities. The facilitators also manage common planning time, oversee administrative issues for the pathway, and ensure that competency courses align with work experiences.

The Change Team, and Juliette Johnson, decided to wait a year before changing the job descriptions of the adminstrators designated as pathway facilitators, in order to see what their new positions would require. As a result, in 1998-99, department heads managed two pathways; the assistant headmaster ran one, and a newly hired school-to-career coordinator managed two. In the summer of 1998, these administrators received training in facilitation, including how to write agendas and set norms for meeting, two skills they deemed extremely valuable.

While the experiences of these administrators have varied, in general they report being overwhelmed by the task of managing a pathway in addition to their other responsibilities. Also, some feel that the lack of time makes connecting with businesses difficult. And not all facilitators came to the task with experience with school-to-career. "I didn't even know what a competency course was," said one. Almost all agree that teaching and learning have suffered as a result.

The level of purely administrative detail work has been exhausting: "I could use some clerical help," says one pathway administrator. Another suggests that the staff did not have enough time to adequately plan, complete, and assess projects with their business partners. In 1998-99, teachers in one pathway invested personal time to make possible a new partnership; in subsequent years, when restructuring is no longer new, such goodwill might not be readily available.

For the two department heads, the challenge of managing a pathway has coincided with the sharply increased focus on content-area standards. As a result, they have been expected to attend district-wide meetings with greater frequency as the state has introduced curriculum frameworks and standards for English language arts, math, and science.

The decision to assign department heads to facilitate pathways may appear to run counter to the more democratic, less top-down structure implicit in the pathway model. To some teachers, this has been confusing. When administrators have brought them proposals from the Change Team on various school issues, teachers have not always known if they are to have input in a decision or if they are simply hearing about a decision already been made. One staff member suggests that administrators should have been more directive in the first year of restructuring, "without pretending that the staff will make decisions." This person believes that a complex and difficult pilot year of change calls for more top-down decision-making; more democratic decision-making could follow in later years. Others feel that the move toward increased staff input in school direction has been key in gaining staff buy-in of the reforms.

In 1999–2000, teachers are facilitating the pathways. This plan allows department heads to be instructional leaders within and across pathways: the teacher-facilitators manage the development of partnerships and the integration of partnerships into curricula. School coaches continue to facilitate the common planning time that is devoted to teaching and learning. As Johnson points out, this structure requires teachers to use their department heads as a resource on instruction. "It is up to the teachers to call in a department head to a pathway meeting to consult on curriculum issues. It is not a hierarchical system—and that's a change we have to get used to."

Based on the experiences of the pathway administrators in 1998–99, the teacher facilitators will likely need a place to bring their challenges and successes in this task. Some current facilitators could have used more ongoing support on how to manage the common planning time. Teacher facilitators will require at least as much support, and some suggest that their facilitation issues will be even more complicated because they will have less authority than administrators. "They will need to learn to lead in a different kind of way," says one interviewee.

Another change this year is a slight increase in Private Industry Council staff at the school, reflecting the school's successes with that partnership. The alliance between the school and the PIC has been strong for years, and that track record helped in the first year's transition, as new pathways struggled to form relationships with partners. PIC staff met weekly with the four pathway administrators, and the coordinator of ProTech felt that the new pathway structure vastly improved the possibilities for partnerships. While she initially felt great pressure from the Brighton High administration to "deliver" work-based learning opportunities to the pathways, she found that the conversations with pathways facilitators were focused and realistic about what the community could deliver and what the school, in its first year of restructuring, could handle. "The facilitators recognized that teachers need to learn how to adequately prepare students for work-based learning experiences."

This regular meeting has been a venue for PIC staff to educate new pathway facilitators on how to guide their pathway in preparing for and structuring work-based learning, such as for the connection with the *Boston Globe*. It has also been a place to discuss such issues as how to equitably match students with placements for the citywide Job Shadow Day.

Future Challenges

In the ProTech model of work-based learning, schools provide serial field trips, or "rotations," in students' junior year, and more structured internships in their senior year. This is an ambitious model to implement school-wide, but Brighton High has nevertheless made this its goal. "It's bringing ProTech to scale," the ProTech coordinator says. She and the Private Industry Council face a dilemma, however: Brighton High would like to offer the ProTech experience—with its intensive case management and structured learning plans—to all students in the Health Pathway. Currently, a subset of students participate in ProTech and have to meet the program's attendance and grade requirements. There is strong concern among some PIC staff that foregoing these requirements will water down the program.

As Brighton High moves toward wall-to-wall pathways, the bilingual program's struggles to staff pathways serve as a useful reminder of another challenge: giving students such a range of choices could create a logistical nightmare. Johnson insists that offering all students the option to switch pathways from year to year is a priority, and this has not been a problem to date. However, if no system is in place for managing those transfers, the school could run into issues concerning teacher placement and the stability of the pathways could be threatened. In particular, if the size of pathways does not remain stable, faculty cohesion within pathways could be threatened and interdisciplinary projects might not be sustained. Instead, the school may need to institute some sort of application process for transfer.

On the pedagogical front, the Change Team now functions as an Instructional Leadership Team, providing guidance to the school on issues of teaching and learning (*see application for participation in Instructional Leadership Team, on next page*). Its major challenge is to align the three school-wide foci on literacy, preparation for the MCAS, and pathway curricula so that teachers no longer see these as competing initiatives. The school will have made a major leap forward if it can figure out how to give each pathway a strong curricular identity through "signature projects" at the same time that teachers prepare students for the high-stakes MCAS.

Brighton and other schools face a major tension here, however: as a state-mandated test, the MCAS detracts from many teachers' sense of efficacy in their classroom. At the same time, the move to pathways can be viewed as further taking curriculum issues away from individual teachers and instituting a more collaborative approach to teaching and learning. Teachers are likely to feel this tension and may wish for the "good old days" when they could close their classroom door and "just teach."

The role of department heads will change as well. With classroom teachers now responsible for administering pathways, department heads can focus more on curriculum issues. "We have to get away from looking at curriculum in discrete units," says Johnson. She hopes the department heads will become a resource to small learning communities, brought in as "consultants" to help pathways implement new instructional strategies.

Department heads will play a critical role in helping teachers align the disparate initiatives that have come to shape their teaching practice; the Instructional Leadership Team will have to help them address this head-on.

Brighton is in good stead with its current faculty. "Brighton has a culture of teachers taking responsibility for the school," a district administrator pointed out. "If they're in a meeting, and the bell rings, every teacher will get up to help monitor the halls. You don't see that in other schools." Others concur: "I love working with this school," said a consultant who has worked with Brighton High for years. "The staff is definitely committed. You have the feeling here that the school really is on the right track."

Brighton High School
Instructional Leadership Team—Application Form

Name _____

1. Why are you interested in joining the Instructional Leadership Team (ILT)?

2. What skills/experiences do you feel that you bring to the ILT?

3. What goals do you hope to accomplish by participating in the ILT?

The ILT will have faculty representatives from pathways, programs, and academic disciplines. Please check the area which you would most like to represent on the ILT.

Pathway _____ (name of pathway)

Academic discipline _____ (name of subject area)

Program _____
(name of program, i.e., Bilingual, SPED, Support Services)

Please be aware of the following:

- Professional Development Points will be offered to members of the ILT.
- Participation on the ILT will give you the opportunity to improve classroom instruction and to develop and implement school-wide goals.
- The ILT currently meets once per week after school for approximately 1 hour and is projected to meet at similar intervals for the upcoming year.
- Two days of summer training are provided for ILT participants.

Landmark High School
New York, New York

Reinventing High School: Six Journeys of Change

A Case Study of Landmark High School
New York, New York

"Everything We Do Here is for a Purpose, and We Get Something Out of It"

By Kathleen Cushman

At eight a.m., half an hour before school starts, Rosa is working Landmark High School's front desk, answering the phone and directing visitors to the principal's office. She has dressed up today in a long-skirted ensemble and pinned her hair into a sleek knot, but she is clearly nervous: "I have Graduation Committee today," she confides. Before a panel of teachers, this twelfth grader must present and defend a fat portfolio of her work in mathematics—including a "user's guide" to an important algebraic concept, a project in which she figures out the profitability of a start-up store selling music CDs, and a demonstration of how mathematical representations have influenced public opinion on the upcoming millennium.

Classes end at noon for the long afternoon of Graduation Committees, and in the spacious area just off the fifth-floor elevators, a dozen students lounge in comfortable chairs. At a window table, boys hunch around a chess board with a teacher. "If they were at some other school, those guys would be playing with forks—you know, that game where they try to break them," says Hervey, an eleventh grade boy. "Look at them—even the supposedly thugs are playing chess!"

Outside Room 706 later that day, Joel paces the hall, waiting. He will submit a "minor" graduation portfolio, in health and fitness, and he has been working on it since entering the school three years ago. He has documented for his Graduation Committee what he does to stay fit: dancing and baseball, both in and out of school. And he has prepared projects explaining several health issues: colon cancer, the genesis of homosexuality, multiple personality disorder. Joel describes with pride the Powerpoint demonstration and a Web site he made to display his research.

In Room 611, three teachers discuss how to break bad news to another student, scheduled to submit his first graduation portfolio later that afternoon. On careful scrutiny, they have concluded that he does not yet understand how to put his research into his own words. "He's going to be very upset," his advisor says. "I wish we had caught this earlier." They will be supportive and gentle, but they agree: this boy has seven more graduation portfolios to prepare, and to succeed in them, "he has to understand that he can't just take research materials off the Internet and present them as his own."

More than any other single factor at this Manhattan, New York, public school, the two-day period of Graduation Committees—repeated in late October, January, March, and May—casts a defining shadow on everything Landmark students and teachers do.

In early September, new ninth graders already hear about Graduation Committee from juniors and seniors, who visit the new students' advisory groups to make sure they know the ropes. In ninth and tenth grade, students start writing about books they have read for the annotated bibliography required for the literature graduation portfolio. After school, in a math-science curriculum committee, teachers go over the unit projects they have devised, deciding which ones might qualify for inclusion in a math or science graduation portfolio. And starting in the eleventh grade, Senior Institute students spend up to nine hours in school each week preparing and revising their work, readying themselves for the days in which they will be the ones in intense conversation with their jury—talking about ideas as if their world depended on it.

And their world does. Landmark has staked everything on the idea that genuine, connected discourse—about important things, among young people and adults who know one another well—can provide the powerful education, safe environment, and emotional well-being that every student needs. Located in midtown, the school enrolls a heterogeneous mix of some 300 students, who come largely from northern Manhattan's Washington Heights neighborhood, where incomes are very low and immigrants from the Dominican Republic predominate. The school emphasizes trust and teamwork. It also introduces the students to the city's resources, taking them to its specialized libraries and placing them as aides in offices and cultural institutions.

The curriculum poses a set of simple but rigorous demands, with the focus on building "habits of mind" and "habits of work" that apply to all academic and workplace tasks. After four years of such continuous close attention, almost all of the students go on to college, where, by all accounts, they continue to thrive.

What does it take for students and teachers to get to the Graduation Committee four times each year, when young people as individual as the city's faces sit with their teachers and show what they know and can do? And can this school's ambitious approach survive?

Since Landmark's 1993 start, the answer has rested on one critical factor: connectedness. Landmark began as part of a strong network of like-minded, small New York City public schools, and it has since called on those connections in numbers of ways, both academic and otherwise. Its curriculum, pedagogy, and other school structures and processes all aim to forge the personal connections among students, teachers, and families that will show young people they matter. Its prime location in midtown helps students connect their learning to the city's resources through service and research projects. Finally, from ninth grade through twelfth, every teacher in every class connects what students are doing with the evidence they must gather and present before the all-important Graduation Committees. Reinforced again and again, the connections hold the Landmark culture together. "Everything we do here is for a purpose," one student declared to a visitor in fall 1999, "and we get something out of it."

Because of a change in state policy in 1999–2000, Landmark faces a new state policy that challenges that culture at its very core. All of Landmark's structures, processes, and belief systems—from curriculum content and instructional strategies to the school schedule and the service learning program—could topple. Until 2000, the only state requirement for graduation had been to pass the minimum-competency Regents Competency Tests in reading and math. Landmark staff could feel confident that students meeting the rigorous portfolio and presentation standards of its own graduation committees would also pass the state requirement and hence earn an official diploma.

In 1999, the New York State Board of Education retired its old tests in favor of new, more difficult Regents Examinations. Landmark staff are struggling with how they can help students meet standards and tests set by the state, while also holding onto the learning experiences that motivate Rosa, Hervey, Joel, and their classmates. Ironically, a change in state policy directed at pushing schools to offer academically challenging courses to all students threatens to undermine the powerful learning experiences at the core of Landmark.

Landmark's priorities have a clear and explicit goal: to keep its urban students engaged in powerful learning experiences until they graduate and go to college. The strategies for reaching that goal involve such intensive and sustained time commitments—by teachers and students, inside and outside the classroom—that virtually no one here can imagine how they will also adequately prepare students for a battery of new Regents tests.

For example, at Landmark:

- Learning to work in groups on project-based tasks dominates the ninth- and tenth-grade classrooms. Teachers emphasize the work process and its accompanying habits—organization, punctuality, focus, cooperation, revision—at least as much as they focus on academic concepts.

- Building trust and community within the school is a high priority, occupying much advisory group time and paying off in a striking atmosphere of calm, safety, and intellectual purpose.
- Connecting learning experiences to the real world of the students takes precedence over a standardized curriculum. Whenever possible, teachers shape their lesson plans around issues that matter to students, whether by choices of reading materials, issues in social studies, or independent projects.
- Getting to know the city's libraries, cultural institutions, government agencies, and business offices is an important goal, taking substantial time in the school day. The tenth-grade, service-learning curriculum also connects with this, giving students a keen sense of how the work habits they acquire will serve them in the real world.

Landmark teachers know their students well enough to know that abandoning these strategies, in favor of a prescribed academic curriculum geared toward the standardized Regents exams, will undercut the school's goals and strategies. "The state thinks you can do Regents and do portfolios, but they've never come in here to look at what it takes to get a portfolio underway," says principal Sylvia Rabiner. "You can't serve two masters. It threatens the very life of the school."

Landmark and its sister New York City alternative schools are attempting to persuade the state to exempt them from the Regents requirement. As they do, a close look at Landmark's beginnings, development, successes, and challenges may shed useful light on its current juncture—and the future it might face.

External Connections

Landmark's state and local context and external support system—its "circles of support," in Fred Newmann's term—hold particular importance in light of its dilemma.[1] The players come from all levels: the state education offices, the city schools department and its district "superintendencies," major school reform organizations, and ad hoc networks at the grassroots level. Understanding how those players operate here may provide clues to whether Landmark, and schools like it, can succeed in today's state and national policy environments.

Established in 1993, Landmark High School got its start as one of eleven new, small "Coalition Campus Schools," jointly launched over a two-year period by the Center for Collaborative Education, the Coalition of Essential Schools, the New York Board of Education, the United Federation of Teachers, and a variety of private funders (later including the Annenberg Challenge's New York Networks for School Renewal). Led by Deborah Meier, Marcia Brevot, and a number of other long-time secondary school principals (many with strong ties to the Coalition of Essential Schools), the partnership had a common vision: to establish a thriving network of autonomous, small schools in New York City that would provide underserved urban young people with powerful intellectual experiences in a personal setting.

At the same time the new schools opened in 1993 and 1994—six in Manhattan, four in the Bronx, and one in Brooklyn—the city began phasing out two huge city high schools, Julia Richman in Manhattan and James Monroe in the Bronx. Eventually,

[1] Newmann, Fred M. and Gary G. Wehlage. 1995. *Successful School Restructuring*. Madison, WI: Center on Organization and Restructuring of Schools.

some of the new schools would share the big buildings thus emptied; others, like Landmark, would occupy space elsewhere, sometimes sharing it with other small programs and schools.[2]

The Coalition Campus Schools Project (CCSP) operates not in the High School Division of the New York City Schools Department but under its Alternative High Schools Superintendency, which, under Stephen Phillips for two decades, nurtured many of the city's two dozen small alternative high schools. The support of this superintendency is critical as Landmark attempts to maintain its autonomy.

For example, how Landmark deals with such issues as building and school self-governance, school size, space, student enrollment, technical support, professional development, administrative assignments, and—most important—bureaucratic paperwork all differ considerably from existing policies of the city's Board of Education. And that board recently replaced Phillips with Richard Organisciak, and as the superintendency has expanded he has provided declining support to the Coalition Campus schools.

In addition, crucial elements of Landmark's graduation system require State Board of Education support. A variance granted by a former state education commissioner (with the support of the city board; its schools chancellor, Joseph Fernandez; and Fernandez's deputy for instruction) until 2000 has allowed Landmark and other CCSP schools to substitute a portfolio assessment system for the (now defunct) content-area Regents Competency Tests (RCT) in American history, global studies, and science.[3] In the state's former two-tier testing system, the RCTs had served as base-level, minimum-competency tests, with the more difficult Regents Examinations as the requisite for a "Regents diploma." That changed under the state's current education commissioner, Richard Mills, who has led the drive for a new, tougher, Regents Examination in four content areas, which all students must pass before graduation.

From its birth as part of the Coalition Campus Schools Project, Landmark participates in a number of support networks that link up to 140 schools in various ways: the Center for Collaborative Education (CCE), the Coalition of Essential Schools (CES), and, since 1995, the New York Networks for School Renewal (NYNSR). Through CCE, Landmark immediately linked with a smaller group of new and existing schools, including Manhattan Village Academy, the Coalition School for Social Change, and Intermediate School 218, a large school in Washington Heights organized into "academies," one of which emphasized service learning. Important help in the start-up stage came from the pre-existing CCE schools (particularly Urban Academy's key assistance in early hiring), and Landmark ended up sharing a building (although not a core philosophy) with the Coalition School for Social Change.

As the years went by, this network shifted, and today, Landmark reaches out to a variety of networks, depending on its need. With P.S. 218 (grades 6–8), it has created a "feeder pattern" that routs many students from its service-learning-oriented academy toward Landmark. With Urban Academy and the other CCE schools linked

[2] Landmark was one of the six schools in the first, 1993 cohort of the CCE/CCSP, which corresponded to the phase-out of Julia Richman High School; the others were the Coalition School for Social Change (with which Landmark has shared a building since 1994), Manhattan International High School, Manhattan Village Academy, Vanguard High School, and Legacy High School for Integrated Studies (which withdrew from the project).

[3] Students at all schools had to take the reading, writing, and math RCTs, and Landmark also administered the science RCT despite the waiver.

with the Julia Richman complex, it participates in like-minded staff development. Landmark also has an important relationship with the statewide New York Performance Based Assessment Consortium, headed by Eric Nadelstern and Peter Steinberg, both principals affiliated with CCE and NYNSR. The consortium has developed a graduation assessment protocol well-suited to its needs and work, and it has lobbied hard for waivers from the new state testing requirements. And Landmark's service learning coordinator, Lesley Cayetano, gains support and help from monthly meetings with coordinators from ten CCE schools with service learning programs.

Finally, the students' own families constitute an important circle of support. Landmark's 300 students largely come from Washington Heights. In 1997-98, about 71 percent of the students were of Hispanic background, 25 percent African-American, 2 percent white, and 2 percent Asian or other ethnicities. About 20 percent qualify as Limited English Proficient, although Landmark has no bilingual classrooms. Over 85 percent qualify for free lunch.

The school is an "odd hybrid," principal Rabiner says: it's a school of choice (students apply, getting information and orientation before they decide to attend), and it's a school to which the district assigns children. The latter, she says, are often children who had not been placed elsewhere and arrive with many problems, while the former often come at the suggestion of junior high counselors who know Landmark as "very personal, very safe, with a very academic orientation."

In any case, Rabiner observes, "Our kids come in just like kids to any public school, with the same range of abilities. We do not test them out. What's most important is that the kids select this school and understand portfolios and don't want to play football. A little school's like a *bodega*, it's not like a big supermarket. It can't give everybody everything."

Many Landmark students come from homes where English is not spoken, yet most parents nonetheless show up at its September open house and at each year's three Academic Graduation Conferences with their children and their advisors. A tenth-grade teacher reflected on his students' home environments:

> *I do not think we have heard more depressing home stories than we heard this year. We had a parent who moved to another state and left her kid alone in East Brooklyn. We had a mother who would not leave her locked apartment because her boyfriend was going to beat her. We had two mothers who left the country, the kids were left with older brothers and sisters.*

Nevertheless, the halls on parent conference day are filled with shy but eager parents, and Rabiner says the great majority are ready to come in whenever they are called about behavior or academic problems.

Mission and Design

Like several other Coalition Campus Schools, Landmark based its central design directly on that of Central Park East Secondary School. Founded and for a decade directed by Deborah Meier, Central Park has shown remarkable success with a comparable mix of students since the mid-1980s. Like Central Park, Landmark's structure, curriculum, instruction, and assessment would all devolve from a focus on "powerful ideas," fostering strong "habits of mind" and "habits of work" *(see box)*.

Landmark High School Habits of Mind

Viewpoint. Whose point of view are we hearing? What ideas are being presented?

Evidence. What is used to support positions? How do we know what we know?

Supposition. What happens when alternatives are considered? How could outcomes be different?

Connections. How do ideas within the work connect? What connections can be made between the work and other areas of interest?

Relevance. How does the work relate to our lives? Why is the work important?

Landmark High School Habits of Work

Punctuality. Students and work will arrive on time.

Organization. Have what you need, know where it is, and know what you have to do.

Focus. Participate fully, listen actively, and ask questions.

Cooperation. Help yourself and others to learn.

Revision. Reread work aloud before handing it in. Correct known errors. Review work with another person, and be prepared to revise.

Landmark set out to prepare all its students for college, grouping them in heterogeneous classes and expecting them all to complete demanding course expectations. But it also made larger-world connections a central purpose, asking members of the school community "to care about and act in the best interests of the communities in which we live, learn, and work, and to be involved in the broader world, confident of our abilities and contributions," as the mission statement puts it.

Getting to those goals entailed a few central strategies, which Landmark spelled out in its mission statement:

- Trust exists and positive support is provided in an atmosphere of high expectations.
- Independence and responsibility are taught and encouraged.
- Work is challenging and meaningful.
- Active learning is balanced by reflection on completed work.
- Students are encouraged to make discoveries, whether working together in heterogeneous groups or independently.
- Class sizes are small and teachers can give their students individual attention.
- Students experience service learning in the community.
- Families are consistently involved in the educational process.

Within these guidelines, teams of grade-level teachers have considerable autonomy in coming up with curricula and instruction, but across grades they agree on a few basics.

"Writing and revising is a given," principal Rabiner observes:

> *So is the concept of using your mind well. The teachers understand it as a given that the model here should be coaching, that the essence of it is for kids to figure things out for themselves. Look at it, think about it, express it in writing, demonstrate it, talk about it, show it to the class. That is the ethos of the school.*

Other key elements of the school design reinforce and amplify that ethos. A ninth- and tenth-grade core curriculum centers on a number of "essential questions" and aims to develop fundamental skills and higher-order thinking. Eleventh grade begins the two-year "Senior Institute," which includes discipline-based courses designed to yield projects suitable for the Graduation Portfolio, as well as internships and college courses. And for all four years, all Landmark students belong to small advisory groups in which an adult advisor provides continual coaching in both academic and social-emotional areas.

Landmark teachers accept common responsibility for the school's graduation outcomes, and all sit on Graduation Committees where they evaluate student work. To receive a diploma, a student's Graduation Committee (the advisor, two other teachers, and invited guests and expert judges) must attest to the satisfactory completion of:

- An appropriate program of courses, seminars, school and community service (three semesters), college courses, and internships;
- At least a minimal grade for all Senior Institute courses taken;
- The required state competency tests (whatever they are at the time); and
- Graduation Portfolios in literature, mathematics, science, social science, arts and media, autobiography (including a post-graduation plan), health and fitness, and a language other than English. Of these eight, students must present the first four orally and defend them before the committee. An optional ninth "senior honors portfolio" consists of an interdisciplinary investigative project designed and researched by the student.

In 1998, a tenth-grade humanities teacher reflected on the purpose of his work:

> *We try to teach some of the following, I imagine: That their minds are powerful, valuable, and capable of many things; that the world has not always been the way it is now; that the "way it is now" is a construction that differs across various lines of race, class, and gender; that there is value in listening to each other even when you disagree with others; that one's work is an outward sign of one's self-discipline and pride; that making decisions and taking actions have consequences, both positive and negative; that ultimately self-respect has some connection to being responsible and reliable.*

Start-Up Struggles

Landmark's start-up year proved rough, with site problems and enrollment issues foremost among its troubles. The school had been promised "a wonderful lease," Rabiner says, on its current building at West 58th Street and Broadway, but the site, occupied by a health care organization, did not become available in time. Two weeks before school opened in September 1993, Landmark set up camp with about 80 ninth-graders in an under-utilized school in Harlem, occupied by several

other programs, including the Harlem Boys Choir. "It was a horrible mess," says Rabiner:

> *We were in this airless, dark place with no windows; we had crowded little tables at lunch; fights were breaking out around the building. We struggled to maintain stability. Little kids from another new school in the building were running through the halls dragging toilet paper with them. Noise from the middle school next door, which was in tremendous disarray, was penetrating our classrooms all the time. We had to stand in front of our group of parents desperately pleading with them not to remove their children: Stick with us, we promise you. But a handful of the kids just immediately withdrew.*

In late spring, Landmark moved into the unfinished second floor of the promised building on West 58th Street. By the next fall, it had carted its materials yet a third time, upstairs to the fifth, sixth, and seventh floors of that building, which it occupies today.

The 80 ninth-grade students Landmark enrolled and kept that year, says Rabiner, were "the desperate and the daring." Almost all of them had chosen the high school late in the previous school year, after having been turned down by other schools. "These were totally disaffected and miserably unhappy kids who had no place to go to school in September," Rabiner recalls. "They brought with them enormous problems: learning problems, language problems, tremendous discipline problems, drug problems, criminal records."

Even six years later, Rabiner can go down the roster and identify what happened to every student from that first group. "A lot of them transferred to other schools where we thought they would have a chance to do better. Some left the city; some ended up in GED programs; some were arrested. Many stayed and graduated."

Those students who stayed through the rough early months "were incredibly loyal," she says, but as the work got harder and the portfolio graduation system took shape, many transfers took place over the next two years. "It was all a mystery to them, and it scared the hell out of them," she says. "They had no older kids to orient them and instruct them, to say, 'This is the way we do it at Landmark.'"

At the same time, Landmark's staff of six teachers, many of them new to the field, labored to establish a coherent curriculum and tone. "We worked in pairs for three weeks in the summer, drafting ideas for curricula," says Jeff Mihok, a Brown M.A.T. graduate who taught elsewhere for three years before helping start Landmark. "At that point, there were no textbooks at all—it was literacy, numeracy, the whole 'less is more' thing." The faculty planned backwards from interdisciplinary exhibitions, setting up three- to four-week units combining math and science, language arts, and social studies.

As teachers began to carry out their plans with Landmark's challenging first group of ninth graders, they also struggled to set the "tone of decency" for which Theodore Sizer's Essential School movement calls. "Tone is the opening challenge of a school," Mihok reflects, "and you don't make it in a vacuum. There's consequences for when kids act out, and there's a clear plan of what you're going to do and when things are going to occur."

As Landmark evolved, Mihok says, its leaders' practical "vision of the future" turned into one of its strengths. "We know all of our Graduation Committee dates; we know when meetings are being held on certain issues," he says. "That may seem like nothing compared to some places, but it's certainly an important part of the school."

As the school added a class each year, it also expanded the numbers of students in each class. It now admits roughly 100 ninth graders each year, although a number transfer out as the work gets harder in the upper grades.

"Ironically, in order to afford what you want for your staff you must increase the number of students, which results in increased class size," Rabiner explains. "If you want a library, a computer coordinator, a guidance person, you must have kids; the formula New York City uses gives you funding based on 28 to 34 students per 'teacher unit.' If you have a social worker who is not teaching, you must then spread 28 additional students among the teaching faculty." By late 1999, the school shared several positions—a special needs teacher, a college counselor, and an English as a Second Language instructor—with the Coalition School for Social Change, which occupies the lower floors of its building.

School Governance

From its start, Landmark teachers have made major decisions collaboratively, with as much input as they could muster from parents and students. With only six teachers and a principal on the initial team, they adopted a consensus model, which the school still uses when making the rare school-wide decision.

As the school evolved, other major governance structures emerged:

- Grade-level teams meet weekly. Each has a team leader and considerable autonomy over decisions involving students and teachers.
- Curriculum groups (one for math-science and one for the humanities) meet weekly, each with its team leader.
- A planning committee is made up of the lead members of the grade-level and curriculum teams as well as the teachers' union representative, the social worker, the computer coordinator, and at least one parent. It meets monthly with the principal to consider leadership decisions.
- A student council facilitated by the social worker meets bimonthly. It sponsors the peer mediation program, plans other student activities, and takes part in district student groups. In 1999, students were also expected to join the Landmark school planning committee.

Landmark's principal strongly supports the grade-level decision-making teams on matters of program. "They know the number of kids they have, and they work out their programs together, depending on their priorities," Rabiner says. In 1999, for example, ninth-grade teachers decided to split two lengthy math-science and humanities blocks into four separate, shorter classes. Although the integrated curriculum had lowered each teacher's assessment load considerably, it also dictated a day dominated by class time, with no preparation period and only a 40-minute lunch break in which to confer with colleagues. Starting in 1998–1999, they traded larger student loads of roughly 75 for a free period daily in which to prepare their classes.

Curriculum and Assessment

Landmark's curricular and assessment structures are built from five, often overlapping elements: the core curriculum of the ninth and tenth grades, the Senior Institute, learning that takes place outside the school through community connections, learning that takes place in advisory groups, and the culminating assessments that take place when students present their portfolios before Graduation Committees.

The school operates on three separate schedules (devised by their respective teacher teams): one for ninth grade, one for tenth grade, and one for the Senior Institute. A sense of coherent purpose, deriving from the common goal of the graduation requirements, pulls all the activities together.

Academic Course Work

Ninth graders at Landmark have four separate 70- to 90-minute classes for math, science, social studies, and English, although the latter two are virtually integrated in their curricular content. Tenth graders add Spanish to that mix, resulting in five core classes.

By eleventh and twelfth grades, in the Senior Institute, students take academic subjects in separate periods of one and a half to two hours, supplemented by advisory periods dedicated mostly to portfolio preparation. Senior Institute students have three kinds of focused academic time:

- Courses in four core academic subjects, meeting in two long blocks and one short session weekly;
- Portfolio workshops, in which students complete and revise portfolios with academic coaching from their advisors; and
- A two-hour weekly independent study period, when they do research or writing, use the computers, or visit libraries.

In a group interview with students, the central importance of their portfolios came through in many comments:

> ***Maria:*** *Everything we do here is for a purpose, and we get something out of it. Like for fitness, everything we do in fitness, we have to document that, that's part of our portfolio too. We document and then we analyze what we learned from the specific exercises that we did in fitness. Everything we do is about learning.*
>
> ***Michael:*** *You're never going to get your paper back and it's gonna be perfect, ready to go. You're going to get it back again to revise it, you're going to make those corrections, and you're going to give it back to the teacher. You can go through a revision maybe three or four times before a portfolio is ready.*
>
> ***Tyescha:*** *In my junior high school they used to just get us ready for the reading and math tests, maybe a writing test, and that's it. [Here we have] portfolios for each thing. You talk more, it's more group work.*

A teacher who was present concurred:

> *I think that the portfolio idea is essentially about getting professional work from the student, and that encourages responsibility and also allows for more creative curriculum and more participatory approach to learning—all the things that a lot of the pedagogy ultimately is related to, but the portfolio spreads throughout everything. For example, in the physics curriculum they're encouraged with their work not to be people who are learning information in a textbook but...to be physicists and do what physicists do. And their work reflects that. Everything's based on investigation.*

Students also discussed learning about the use of time:

> ***Maria:*** *The curriculum of this school is really similar to that of a college, so that's why we're more prepared than traditional schools when we go to college. Because colleges do give you a lot of free time. You make your own schedule, so I think we're more ready for that.*
>
> ***Jimmy:*** *Actually, it's not free time. When you say free time it sounds like you get to play—it's portfolio workshop, and that's basically when you stay in your advisory...for an hour and a half or something. You get on the computer and you start working, get information on stuff, putting your portfolio together*

when you're done you go to the teacher, he corrects it, he gives you advice, what you should do or what thought you have.

Most students returned repeatedly to their close relationship to their teachers:

Maria: *What I love about this school is that some kids give up but the teachers put them back on track. They never give up on you, no matter how much you say, "I don't want to do this, I don't want to do that." They never give up on you, they're always there for you, after school, they even take you in the middle of a class and take you in the back and talk to you. There's times when I didn't want to do this, it's too hard, and they kept pushing me. And now I'm on a higher level, and I don't want to give up now. They're preparing me for college. We don't do sequential things like we did in my old school.*

Erik (1998 graduate): *The principal thing of this school is the relationship you have with the teachers—the teacher says, "Erik, what's your opinion," instead of "Excuse me, you in the back!" They know you and sometimes they'll pat you on the back and say, "I know you have potential." That makes you feel good, and that's what makes you do the work instead of being in the back of the class, like all my friends in other high schools, with no motivation.*

Academic support for the culminating Graduation Portfolios starts in ninth and tenth grades. A senior boy remembers early experiences that set him on the path to meeting the school's requirements:

The school has something called the tenth-grade retreat at the end of the year. They all have to do parts of their portfolios to be eligible to go on this trip. They all get in a bus and head upstate and some kids from Senior Institute go with them. And we sit down in a room and explain to them what's a portfolio, what you have to go through in order to hand one in, how it's graded, and give them samples. And after that, we just become friends with them; we have a barbecue, play volleyball, and swim and stuff.

Community Connections and Service Learning

At each level—ninth grade, tenth grade, and Senior Institute—Landmark creates opportunities for students to learn by getting into the city around them. "So many of our kids have never ventured outside the little block where they live," observes Vivian Orlen, Landmark's assistant principal and a Senior Institute advisor. "The school has made a commitment to exposing the kids as much as possible to New York City."

Every Tuesday afternoon during the fall, for example, ninth graders and their advisors visit public libraries. They look at primary documents in the Main Branch; they visit the New York Performing Arts Library at Lincoln Center; they delve into African-American history at the Schomburg Center for Research in Black Culture, and into technology at Science, Industry, and Business Library. "After about two months, they are expected to know where they can go for resources they need for different projects," Orlen says.

In addition, ninth graders use every Friday's advisory group for the "New York Experience." These are two-hour, small-group expeditions to a menu of city attractions, such as museums and theatres, the International Center for Photography, private and public colleges, the Brooklyn Bridge, and Chinatown. The trips often complement the curriculum, and writing assignments always follow. "Most people don't know about the city," said a senior, remembering her ninth grade year. "We live in it, but sometimes our parents don't take us places."

In the spring term of ninth grade, and all year in tenth grade, students volunteer their services to some 30 organizations throughout Manhattan. Most leave school for two hours one afternoon a week to work as teaching aides, administrative assistants, and guides in schools, hospitals, community agencies, businesses, hospitals, and museums. A few students do their volunteer service in Landmark's own administrative offices. At the end of each semester, supervisors evaluate the students' work habits, which becomes a part of their school assessment records.

For the service learning experience, coordinator Leslie Cayetano begins with several weeks of orientation so that students understand what the various placements involve and the fundamentals of workplace expectations. Students specify their top three choices for a placement, writing a short essay about why they want their first choice. By the end of September, every tenth grader has a service assignment, and Cayetano begins the process of monitoring their attendance, checking on their progress, and communicating with workplace supervisors. At the same time, she prepares new placements for an influx of ninth graders who will begin their service in the second semester.

Fitness activities also take place outside the school, which has no gym. During this required, two-hour block weekly in ninth and tenth grades, students may visit the gym at a nearby YMCA, go to Central Park for outdoor sports, or take classes at a dance studio in the neighboring Lincoln Center area.

More community connections arise in the Senior Institute if students arrange internships or special projects with various city institutions. Landmark has partnerships with Arts Connection, the City Center for the Performing Arts, the Children's Museum, Legal Outreach, and the New Victory Theatre, among other organizations. Students can also take free courses for college credit at the Borough of Manhattan Community College (BMCC). "They take things we can't offer here," says Assistant Principal Vivian Orlen, "and they get a chance to see what college is like. Some kids who were on the fence about going to college come back saying 'I can do that.'"

Whatever the context, students speak warmly of their learning experiences outside the classroom:

> ***Carmen:*** *I had the chance to be in a program at the Museum of Natural History where I get to work with scientists. That has made me now even more want to go into the field of science.*

> ***Hervey:*** *When I first came to this school I was not open-minded. I just wanted to graduate, not even go to college, and just get a job and make money.... In ninth grade we had a government class, and we were in a program where we had to figure out whether we had a right to talk about something and the government tried to hide it.... We actually went to a real courthouse, to Federal Hall.... Last year, the school offered me a law internship, with lawyers. I'm already taking college courses at BMCC. And it's made me look at the future in a broader picture and has made me want to do my thing, pursue a career, get a degree—it's given me an incentive.*

> ***Melissa (1997 graduate):*** *I [did portfolio research] about violence in schools, and then I formed my own solutions. I talked to a couple of police officers and came up with a whole thing that could actually take place, that could work with the schools. And how I believe it would help the whole situation of teenage violence in schools.*

> ***Jimmy:*** *I always thought the Brooklyn Bridge was a regular bridge till I walked there and saw the historical significance and what it did to humanity.*

Advisory Groups

Probably Landmark's most crucial organizing structure is the advisory group. Each day, one teacher advises roughly a dozen students in meetings that monitor academic, social, and emotional issues, while forging close bonds among students and teachers. Landmark "advisories" are organized by grade in ninth and tenth grades, then combined for a two-year stretch in the Senior Institute. They meet on differing schedules and do different kinds of things, based on the students' most pressing needs at each level.

In the ninth grade, advisory focuses on bonding, discussion, organization, and reflection. In over seven hours a week of scheduled time, it aims to acclimate new students to the school culture; help them come to know other students and staff; stimulate them intellectually through reading, writing and discourse; build good work and life habits; introduce them to New York City's resources; and help them contribute to the community through service learning.

Tenth graders' advisory time yields to the academic schedule to accommodate Spanish classes. Aside from 15 minutes daily on Monday through Thursday, it meets every Friday afternoon for 75 minutes. Sophomore advisory focuses on preparing students for the Senior Institute and the graduation portfolios they will begin presenting at the start of the junior year. Students focus on typical teenage issues concerning personal decision-making, health, and behavior. They begin to explore post-graduation plans and reflect upon their service learning experiences.

In eleventh and twelfth grades, Senior Institute advisors coach students through the two-year graduation portfolio process and continue to foster a sense of school community and their social and academic development. Seven hours weekly, students prepare and revise portfolio work with the coaching of teachers. They also help orient ninth-grade advisory groups to Landmark's system, and they explore academic, personal, ethical, and social issues. Friday afternoon includes an additional two hours of independent study.

Many students offered testimony about the ways advisory groups affect their attitudes and actions:

> *In junior high school I was always the outcast.... I never listened to authority. I was never into school. They used to say I was bright—the only thing is I had bad friends and stuff. So when I got to Landmark, the special attention they put on the students since it's so small, it made me feel more comfortable.... The advisory group becomes part of you. That's what makes the school.*

> *Landmark, it's just like a big happy family. In advisory it's a time to communicate with the group and the advisor, and sometimes they give you advice if you're not sure about something. Like, for instance, I had to do a college essay and I talked to my advisor about possible topics.*

Graduation Committees

Landmark considers its Graduation Committees particularly important, because these panels judge the school's success at its major task: to help every student graduate from high school prepared for college and career. Every staff member serves on a Graduation Committee each year, and every teacher's job includes preparing students for the academic expectations of the committee.

Committees, which form at the start of the year, include an advisor from the Senior Institute, another faculty member in a complementary academic area, and a third member. At least two of these three will remain constant throughout the two years

that a particular student presents Graduation Portfolios to his or her committee. In addition, the presenting student may invite one Senior Institute student to attend as an assessing and voting member of a particular Graduation Committee, as long as that student has completed at least one satisfactory Graduation Portfolio, previously attended a Graduation Committee as a non-voting participant-observer, and attended an orientation for the task. With the advisor's approval, other students from any grade may attend as formal observers, and family members are always invited.

The Senior Institute advisor is the linchpin of the Graduation Portfolio process: he or she helps students understand the required components of each portfolio, coaches them through its timely and satisfactory preparation, and prepares them for the presentation and evaluation process before the committee. The advisor also updates families and other committee members on each student's progress, then schedules and facilitates Graduation Committee meetings.

Because they represent diverse academic perspectives, other committee members offer important help and encouragement to students as they prepare Graduation Portfolios. They may assist the advisor if a particular problem arises with a portfolio or its components.

When the day comes, each committee follows the same procedure, facilitated by the Senior Institute advisor. After brief introductions, the student introduces the portfolio, which committee members already have read. For "minor portfolios" (arts and media, autobiography, health and fitness, and second language), committee members then give brief feedback. For "major portfolios" (math, science, literature, and social science), the student makes an oral presentation and responds to the committee's questions.

Next, using a common assessment grid reflecting the school-wide "habits of mind" as well as style and mechanics, committee members discuss their assessments with one another, often revising them in the process (*see Graduation Committee Assessment Grid on next page*). Finally, they report their final assessment scores, which the advisor tallies to arrive at the final assessment. The entire portfolio and its accompanying assessment forms become part of the student's permanent school record.

Students buy in to the system of graduation by portfolio:

> ***Michael:*** *I think this school is extremely more academically demanding than other traditional high schools, for the simple fact that what you learn you have to express in your own words and teach back to the committee what you've learned in your own words. For example, when you present a math, science, literature, social science portfolio, you're going to have to teach them what has been taught to you but in your own words. And you have to defend yourself, and just prove to them that you have an appreciation, that you know everything you've learned. I think it's more academically demanding in the fact that you have to learn everything instead of just studying for a test.*

A teacher reflects on the portfolio experience and concurs on its value:

> *It definitely requires students to be responsible and accountable for their work. Once you are responsible for your work, you have to basically defend or bring your work in front of people who are themselves professional. It gives you a completely different mindset. I had, for example, a student who was turned back. And today, I came in thinking two things. One, I am going to meet a very bitter student who is going to be very upset, or I'm going to meet a student who's prepared to go through and do the original work that's necessary to bring his work back in front of the Grad Committee. And I met the latter. The student sat down and got straight to work. To his credit. That in itself shows a level of professionalism.*

The Graduation Portfolio system has its rough spots. One tension arises from the school's longstanding policy—modeled after that at Central Park East Secondary School—to keep students moving up with their class even if their work is less than satisfactory, trusting them to rise to the occasion when the time comes to assemble a Graduation Portfolio. Teachers worry that some students come into the Senior Institute lacking the skills to complete the work. "There's been a lot of talk about whether we should not promote them," Sylvia Rabiner says.

Teachers in the Senior Institute also wrestle with their dual role as portfolio advisors and academic course instructors. "I found myself not thinking about my classes and doing last-minute planning because I was spending all my time reading over portfolios and coaching students," one new teacher said. "It's hard to come up with the balance, and it's really easy to take the students' work when they say, 'Can you read this?'"

In addition, teachers say, students who complete a major academic portfolio during junior year or fall of senior year have little incentive to do their best in that academic course during senior year. "They're taking a whole year of English and required to do two major papers in those classes, and they already completed their portfolio," an English teacher worried. "The work in the class is almost secondary."

Students also get confused about where to concentrate their energies, teachers say. "They need [the portfolio work] to graduate—should they forget about their classes?" one commented. "But then they need to pass all their classes as well. It's kind of conflicting for them."

Graduation Committee Assessment Grid

VIEWPOINT	EVIDENCE	CONNECTIONS	STYLE	MECHANICS
Perspective and Focus	**Credible and Convincing**	**Contexts and Relationships**	**Engaging**	**Intelligible**
• Presents position effectively • Recognizes and considers other views when appropriate • Clearly states conclusions when appropriate • Clearly identifies and addresses essential questions and issues • Demonstrates an in-depth understanding of issues	• Ideas are supported by specific, accurate, and relevant evidence • Analysis of evidence • Ideas developed in appropriate length • Cites relevant sources: statistics, primary sources, maps, diagrams, etc. • Discusses strengths and weaknesses of evidence when appropriate	• Makes clear the relationships between ideas; notes connections and patterns • Demonstrates relationships between issues and larger contexts • Makes conjectures and predictions when appropriate • Organized so that all parts support the whole • Contains useful transitions	• Effective use of language • Awareness of audience • Explains and presents concepts so that they are understandable to the audience • Creativity and a distinct identity • Consistency • Variety in formatting	• Excellent appearance • Correct format (bibliography, end notes, charts, graphs, etc.) • Standard notation (punctuation, formulas, symbols, etc.) • Clear paragraphing and varied sentence structure • Broad vocabulary and word usage • Word processing conventions
4-Distinguished 3-Good 2-Satisfactory 1-Minimal 0-Unsatisfactory	4-Distinguished 3-Good 2-Satisfactory 1-Minimal 0-Unsatisfactory	4-Distinguished 3-Good 2-Satisfactory 1-Minimal 0-Unsatisfactory	4-Distinguished 3-Good 2-Satisfactory 1-Minimal 0-Unsatisfactory	4-Distinguished 3-Good 2-Satisfactory 1-Minimal 0-Unsatisfactory

Components of the Major Graduation Portfolios

Literature

Students will demonstrate exposure to a wide range of writings and the ability to understand and discuss various forms of literature critically. *(Requires a presentation and defense.)* Requirements: 1) Prepare an annotated bibliography composed of novels, short stories, plays, essays, and poems, including works reflecting cultural diversity. 2) Prepare a literary project which may include secondary research, demonstrate critical analysis, and indicate an understanding of literary conventions. 3) Prepare a project which demonstrates an understanding of the conventions of creative writing by authoring a short story, one-act play, poem, novel (a selection), or reflective essay. Required: a reflection on the writing process, including a discussion of the literary aspects of the project.

Mathematics

Students will demonstrate proficiency in moving from basic skills to complex problem solving. Students will exhibit an understanding of mathematical applications to such areas as science, economics, politics, and technology. *(Requires a presentation and defense.) Requirements:* 1) Using past and present coursework, create a user's guide to key mathematical concepts, including examples of each. 2) Prepare a project using applied mathematics to communicate ideas and solve problems. This will include appropriate mathematical language and representations, such as tables, drawings, graphs, equations, and geometric/algebraic models. 3) Demonstrate how numbers and other mathematical representations are used or misused to support and influence public perception, opinion, and decision-making. A requirement for this part is a mathematical component that includes a discussion and an explanation of the concepts used.

Science

Students will demonstrate exposure to a variety of scientific topics and a clear understanding of scientific methods. Students will examine a world issue from a scientific viewpoint. *(Requires a presentation and defense.) Requirements:* 1) Using past and present coursework, create a user's guide of key scientific concepts including examples of each. 2) Design an experiment which explores a scientific question. Perform the experiment and reflect on both the findings and the success of the methods. 3) Prepare a project which investigates a contemporary world issue from a scientific perspective. Demonstrate an awareness of the impact of this issue on society. Required: a scientific component that includes a discussion and an explanation of the concepts used.

Social Science

Students will analyze issues or events and demonstrate an understanding of their contemporary, historical, and geographical contexts. Students will demonstrate the capacity to examine and reason about social issues. *(Requires a presentation and defense.) Requirements:* 1) Using past and present coursework, prepare an annotated time line of significant people, places, events, and themes throughout world history over a broad span of time. Explain and justify the relevance of each entry. 2) Select an entry from the annotated time line and prepare a research project that provides a critical context for the person, place, event, or theme. Use primary and secondary sources to develop and document a specific argument. 3) Prepare a project which investigates a contemporary social issue or problem. Consider alternatives, strategies, or solutions for dealing with the issue or problem and develop a plan of action.

Components of the Minor and Honors Graduation Portfolios

Arts and Media

Students will demonstrate an understanding of creative expression. Students will demonstrate an understanding of the mass media. *Requirements:* 1) Demonstrate talent or experience in one of the following: music, drama, dance, video production, or one of the visual arts. The demonstration will be accompanied by a personal statement describing interest in the performance area. Alternatively, evaluate a work of artistic expression, placing it in a cultural and historical context. 2) Prepare a project which includes research, demonstrates, critical analysis, and indicates an understanding of mass media (television, movies, music, newspapers, magazines, videos, etc.). The project will show the ways in which the media addresses specific societal and ethical issues, such as race, class, or gender.

Autobiography

Students will demonstrate thoughtfulness and reflection on their lives. Students will develop post-graduation plans. *Requirements:* 1) Develop a project which explores the key events, people, and relationships in the student's life. Examine opinions and beliefs, special accomplishments, interests, influences, and growth over a period of time. 2) Create a post-graduation plan that describes the purposes for earning a diploma. College-bound students should assess the kinds of grades, Scholastic Assessment Test (SAT) scores, and courses that their colleges of choice require; also, a plan for financing one's education must be developed at this time. Students considering employment or technical training programs must provide a list of potential employers or training options. 3) Prepare a resume, including all community service placements and internships. 4) Provide at least three letters of recommendation from a variety of persons familiar with the student's life and work: a teacher, employer, Service Learning contact person, etc.

Health and Fitness

Students will demonstrate how their past physical activities will help lead them toward lifetime habits of health and fitness. *Requirements:* 1) Document all physical activities participated in since the ninth grade, both in and out of school. Documentation should include letters from coaches, instructors, or counselors. 2) Demonstrate an understanding of three or more basic health issues, such as nutrition, disease prevention, HIV/AIDS, sexuality, and substance abuse.

Language Other than English

Students will demonstrate minimum competence in speaking and understanding a language other than English and will indicate an awareness of the value of dual language competence. Students should demonstrate a general appreciation of the culture of the target language. *Requirements:* 1) Demonstrate through a comprehensive examination or an approved project the acquisition of a language other than English as a speaker, listener, reader, and writer. 2) Present an outline of experience, both formal and informal, with cultural issues, which may include family background, travel, bilingualism, or course work.

Senior Honors Portfolio (optional)

Students will design an investigative project which considers the perspectives of two or more academic disciplines. Students will use primary and secondary research and will include a reflective statement. *(Requires a presentation and defense.)*

Expectations for Graduation Portfolios

Critical Thinking: In all Graduation Portfolios students will exhibit critical thinking skills that have been coached in classes using the Habits of Mind.

Computer: Students will be introduced to a variety of software programs and computer applications and will be expected to use these technologies with proficiency. All students are expected to demonstrate a mastery of basic computer skills within their Graduation Portfolios.

Portfolio Styles: The Graduation Portfolios should employ a variety of styles, such as writing, video, visual art, performance, models, charts, graphs, and maps.

Group Projects: Group projects may be used when preparing Graduation Portfolios. However, documentation clearly stating the student's role in the project must be included.

Presentations and Defenses: During Graduation Committee meetings one portion of each required portfolio must be presented. Following this presentation, students should be prepared to discuss questions about the entire portfolio.

Coursework: Students will be expected to draw on their coursework to develop their Graduation Portfolios. Therefore, students not completing coursework will postpone their Graduation Committee meetings. This will most likely delay graduation.

Measuring Landmark's Success

Graduation Portfolios are not only the cornerstone of Landmark's program. They are also central to its accountability plan—not just as the publicly demonstrable product of student learning but as the catalyst for everything else that one might document or measure, from rates of attendance to college admittance, from teacher satisfaction to school safety and parental involvement.

As part of the Coalition Campus Schools Project, Landmark is closely watched by the National Center for Restructuring Education, Schools, and Teaching, a program at Teachers College, Columbia University. In particular, NCREST researchers Jacqueline Ancess and Suzanna Wichterle Ort have followed the CCSP for some years, documenting its collective statistics on enrollment, graduation, and drop-out rates as well as many other indicators.[4] In addition, the school files an annual school report with the city's Alternative Superintendency, which is made public as part of the New York State School Report Card.

Closer scrutiny of the school's success with students resulted from an issue that came to a head in fall and winter 1999–2000, when Landmark and other New York alternative schools in the Performance Based Assessment Consortium lobbied the state education department for waivers from the new Regents Examination requirement. In January 2000, Commissioner Mills allowed a one-year variance in social studies, mathematics, and science but refused a variance for the new English language arts test. In the meantime, the state plans a study comparing the validity and reliability of the portfolio-based assessments that Landmark and others use to that of the new Regents examinations.

[4] Jacqueline Ancess and Suzanna Wichterle Ort. 1999. "How the Coalition Campus Schools Have Re-imagined High School, Seven Years Later." Teachers College, Columbia University National Center for Restructuring Education, Schools, and Teaching.

School Climate and Safety

As an Essential school, Landmark has norms for respectful conduct and a "tone of decency." Teachers, students, and parents all report that the school's small size and advisory-group structure militate against students' breaking these norms. "Safety depends on a very personal knowledge of every student," says principal Rabiner. "I know a lot of the kids personally, and every advisor knows every student well. For the least little problem we call families and they come in. It's a very close relationship."

Students concur:

> ***Lannie:*** *At Landmark you're more of an individual. They care about your feelings, what's going on at home and what's going on in school. You're not just a number.*
>
> ***Girl:*** *They're there for you. To talk to somebody. Because sometimes you just fight to fight when you could let it go. But instead of letting it go just talk about it, it's better like that.*
>
> ***Michael:*** *The school is so small—when I got here, after a week you know everybody. They don't put you aside, you're never going to be an outcast when you're at Landmark. You're always going to have friends, somebody is always going to be there for you, to look out for you.*

Senior Institute teacher Harry Guy, who spent much of his career at Julia Richman before coming to Landmark, comments on the difference between the two schools in terms of safety:

> *Security is one of the things we don't worry about here at all, which is a remarkable thing in a city school.... That's a big weight that's lifted from the teacher. At Julia Richmond, you would lock your door at the end of the period. There were guards in the hall, students had to go through X-ray machines when they came into the school, and there were so many people, you didn't know who the students were, if there were intruders in the building.*

According to Landmark's reports to the district, the school suspends roughly 4.5 percent of its students in an average year. The figure, which includes multiple occurrences for the same students, is about 2 percentage points lower than similar city schools.

Since 1998, selected members of Landmark's student council have received training in peer mediation. Bulletin boards on each of Landmark's three floors hold "peer mediation referral forms;" any student or teacher can use these to request an intervention to resolve an interpersonal conflict involving themselves or someone else. Whether the referral arises from an argument, a fight, a rumor, harassment, or another problem, the person filling out the form names the parties involved and the time the situation occurred.

Students are well aware of the climate of safety:

> ***Girl:*** *There are no metal detectors, no student ID, nothing like that, because we're not that type of school.*
>
> ***Boy:*** *The main reason we don't have a lot of trouble in this school, a lot of fights, is because the atmosphere is so friendly and so family-oriented.*
>
> ***Tyescha:*** *In junior high school everybody knew in a few hours that at lunchtime there was going to be a fight, or a confrontation.... Sometimes people would fight and they wouldn't even know what they fought for. Here it's more relaxing. You know when you come in that nobody's going to jump you.*

Jennifer: *In other schools, when two students fight, the students or the teachers just watch. But in this school, if students fight, the students themselves stop them. Their own friends stop them instead of watching.*

Jeff Mihok, who has taught social studies at Landmark since its start, commented on the strategies he and other staff members use when students do present behavior or attendance problems:

I deal with it one-on-one with the kid first. I just clearly say to them what I need and why: "We want you to learn, and we want to respect you as an individual, but as soon as you violate other people's right to learn, then it becomes a bigger issue than you.... " You ask them questions like, "What's going to happen to you if you continue doing this?" I think most kids see a tone that has been set that it's kind of nice to succeed.

Not everyone responds positively, Mihok acknowledged:

Sometimes the kids turn around and sometimes they don't. If they begin to not come in, you call home. Sometimes you can't get through to home, and sometimes no one comes to the conference. We're only with them six hours a day.

In general, teachers says that the school's climate directly contributes to academic success. A Senior Institute science teacher reflected:

In the first month of school, some small incident occurred in which a student was acting inappropriately, and some other student stepped in and said something before I even had a chance. Since I don't have to think about behavior management issues, the end result is that I can focus on teaching and learning in the classroom.

Student Engagement

A visitor to Landmark sees a level of purposeful activity absent from many public school settings. The school does not take student motivation for granted. The interdisciplinary project-based curriculum, the four-year advisory system, the range of active instructional strategies, and the very structure of the school day are directed at keeping students engaged. The service learning and internship experiences further serve to motivate students, through opportunities to test out different identifies, contribute to their community, and enter the adult world.

It is little wonder that Landmark students report how much they enjoy coming to school. One measure of this is how many of them choose to stay beyond the regular school day. In a spacious room just off the school's main offices, they gather in small groups, talking or playing chess. Staff members move in and out of the conversations freely as they go about their after-school business. Two recent graduates commented:

Melissa: *I know my class, we enjoyed the school, and at 3:00 we didn't want to go home!*

Erik: *We stayed here till six o'clock at night, me and my friends.... We talk with the teachers most of the time.*

Faculty not only talk with students; they also talk about them with one another. As a result, students feel the teachers care about them. Assistant principal Vivian Orlen comments:

Every teacher on a grade-level team always knows every kid, whether they teach them or not, and that adds to the personalization. Since they don't move with the kids through the years, it ultimately means that they know all the kids in

the school. A lot of the talk in the teachers room is about kids. And the kids see themselves as important to the teachers; they know that at the morning meeting we're talking about them.

The school also receives reports that a positive attitude towards schoolwork carries over to homework. A mentor for one of the students notes a change in the boy's behavior:

At the beginning of the term he said to me, "I'm doing my homework! I never do my homework!" I think it means a lot that people recognize his strengths here, don't just trample him for some of the obvious problems he has: talking in class, not doing his work. [In the conference] they pointed that out unflinchingly, but they also talked about things that he does well: that he's very creative, he's very smart, he has leadership qualities, and he's outgoing and kind and creative. And he's interested in class. This year he's been down [to see me] a few times about math and about the Greeks and why did Socrates take poison? It's very thrilling to see him becoming engaged in this way.

Of course, it is also important to look at the students who do not make it. Landmark is demanding, more so, most students report, than many other schools. Some students leave the school when they realize they will soon face moments of truth in the form of Graduation Portfolio presentations. Nevertheless, the drop-out rate (reflecting students who leave school entirely, not those who transfer elsewhere) is 1.5 percent, roughly four percentage points lower than for similar city schools and the city as a whole. Even the transfer rate has been steadily decreasing throughout Landmark's history, Rabiner says.

Teachers' Professional Satisfaction and Growth

The school's small size and teaching-team structure seem to improve the tone of the teaching staff as well as the student body. "Compared to a large school, you do get to know everyone [on the staff] very well here," observes teacher Harry Guy. "And because there's such interaction on portfolio committees and curriculum meetings and full staff meetings, there is a tremendous sense of community."

Curriculum planning is a major responsibility, and one that Landmark teachers often fulfill outside the normal school schedule. In Landmark's earliest years, teachers spent three summer weeks planning curricula together, but they whittled that time down to two weeks and eventually to one week. Certain curricular decisions—such as school-wide adoption of an Interactive Mathematics Program and an Active Physics curriculum—reduced the necessary time to create materials from scratch. Other curricula, once prepared, could be repeated or refined year after year. In the Senior Institute, teachers develop their elective courses independently, but they use after-school time or curriculum meetings to informally confer.

Although the work is demanding, English teacher Carol Dispagno says it's worth it to her:

The time I spend here, I always feel is my choice. It's spent on creating curricula that I love, that I want to teach, that I see students respond to. If it was administrative things or things that weren't student- and teacher-related or learning-related, I probably would be stressed, but since I'm doing what I love to do, it's worth it.

Some of Landmark's grade-level teams have common planning time during the school week, and all have the flexibility and autonomy to adjust their schedules as necessary, as the ninth-grade team did in 1998–1999.

An enormous additional commitment on teachers' part at Landmark comes from the long hours they sit on Graduation Committees four times yearly, reviewing and assessing Graduation Portfolios. They consider it a crucial part of their professional life, but they also resent what they see as the district's obliviousness to its demands and its imposition of new testing requirements. Dispagno, who is Landmark's teachers' union representative, comments:

> *Everything after three [on Graduation Committee days], teachers are doing because they're committed to their students, but it's not recognized that those hours are being spent. We still have to have classes in the morning. If the state accepted this form of assessment, we could be doing this during what is traditionally testing week. I brought it up to the union...and the union is not opposed to it. But...even though they say go ahead and do portfolios, when it comes down to state assessment, we're still mandated to have testing week for exams.*

Graduation Committees also heighten teachers' sense that their work in individual courses has relates directly to students' future success. A ninth-grade teacher observes:

> *I've got to get my students through level one of getting to the point where they can do a great portfolio. And that means that I need to be not only a teacher of the curriculum but also of them as learners and students—people who can manage their time, meet deadlines, pull together a project, work in a group.... Once they get to the Senior Institute, then the demands are huge and they have to meet the demands.*

In terms of professional growth, Landmark follows a philosophy of "practitioner-driven reform": teachers collaborate to increase their own knowledge base and share expertise, both during the regular school day and on special staff development days. In particular, teachers regularly participate in professional development opportunities offered by the networks to which Landmark belongs. The Center for Inquiry in Teaching and Learning, sited at the Julia Richman Educational Complex, offers them regular workshops, seminars, and discussion with colleagues in similar schools on subjects like portfolio assessment, college admissions, and classroom strategies for English language learners.

In addition, teachers' cross-grade participation in assessing Graduation Portfolios creates a structure in which not only student work but also teacher work receives public scrutiny. The criteria for Graduation Portfolios, teachers say, affect not only how they shape their curricula but also the standards of classroom teaching and assessment to which they hold themselves. "I see the portfolios as even more assessment criteria for the staff than for students," one teacher commented, adding:

> *If [students] don't produce competent work, then the advisors are going to read the kids' work, and then you've got other teachers assessing the teachers' assignments, the tasks, how much support the teacher gave in teaching the kid how to do this kind of thing. Granted, the kid may just really not want to work and you've tried everything, and the paper doesn't really show [teacher quality], but...it is an incentive to a teacher to do better, more professional work.... When I'm working with a student on her portfolio, and it's not one of my advisees...I'm thinking to myself, "Oh no, the advisor sees this, there's mistakes in it, I should have caught that!"*

Compared to the norms of teacher professionalism in much larger schools, Sylvia Rabiner says, Landmark's system is exceptionally demanding:

> *I was an English teacher [in a school of 5,000] with five classes a day. I don't think I ever had kids do a research paper in my seven years of teaching in that school. The school wasn't set up for it; you had hundreds and hundreds of kids, you did short stories, short novels, on-demand writing. Multiple-choice-type question testing. There was no staff development, no talk of pedagogy that I can ever remember. Mandates would come down: do this, do that. While there were some very fine teachers there who certainly wanted to learn how to teach, and we explored amongst ourselves how to teach writing and so forth, there was no organization set up to make that happen in that school.*

Despite the school pride expressed by many members of the staff, Landmark, like most urban schools, struggles to find and keep good teachers, especially in hard-to-fill fields like math, science, and Spanish language. Teaching in a start-up school where staff must fill multiple roles makes this a potentially exhausting job, and the faculty contains more than its share of younger teachers, often more idealistic but also less experienced than is the norm for city schools.

In fact, the staff's relative youth and inexperience presents a school-wide challenge. In spring 1999, almost two-thirds of Landmark's teaching staff of nineteen had less than five years experience, compared with 40 percent in similar city schools. The percentage holding a masters degree or higher (58.8 percent) was smaller than in similar city schools (80.1 percent). An August 1999 Title I evaluation from the district, which noted the youthfulness of the staff, suggested that Landmark provide more support, especially mentoring for new teachers, in such areas as English as a second language, classroom management, and instructional strategies.

The younger teachers also tend to turn over more frequently. "They stay a few years, I lose them," Rabiner says. "Several have left to go on to graduate school, many of whom never expected teaching to be their lifetime profession. Others left the city. However, we have never had someone choose to leave in order to teach in another New York City public school."

Parental Involvement

Although Landmark does not conduct parent surveys, teachers report that parent satisfaction appears very high, especially regarding the school's size and safety. "To be honest," Sylvia Rabiner says, "parents are so grateful that their children are safe here that we could choose any curriculum in the world and they wouldn't object."

Yet the curriculum does matter. A parent whose daughter attends Landmark offers a variety of reasons for avidly supporting the school:

> *We picked [Landmark] because it had fewer students than these big high schools. I've got five children, three older than her. They went to big high schools, they dropped out, all three. And she's doing great. Put it this way: her marks are coming up; she passed all her classes this year. And the way they mark them, the parents understand it better than the other way. They tell you what it means, and tell them what they need to improve, what they need help on. She's not thinking of dropping out. She's planning to go to college. They all go to college here!*

In fact, parental disagreement with Landmark's academic program is virtually unheard of. A mother of a sophomore girl comments:

> *The other choices that I looked at, the schools were too large. I came from a big school.... You get lost in the shuffle in a school like that. Each child learns at a*

different pace, I don't care what class they're in, and [for] the ones that don't catch on as quickly...they can't slow it down, and they have a certain amount of material that they have to cover from September to June. So if the student isn't excelling they get frustrated and it makes them not want to participate at all.

In this school, the advisor, the teacher, they all know the students well. The class is so small that they can remember to focus on this child. I believe that their thing is independent thinking, independent learning. Not so much of their talking and telling you their point of view. They're seeing what you think about the world around you, the world that you live in now—and how could you change it and make it better. And that's what it should be about. She wants to be a bilingual lawyer, so independent learning, independent thinking, a lot of writing, a lot of talking, are all qualities that a lawyer needs.

Parents confer individually with their child and the advisor during Landmark's three Academic Progress Conferences each year, as well as its Open House in September. Attendance at these sessions is high. Parents are also invited to Graduation Committee meetings, although few attend. The reasons for low attendance are not clear, but because Graduation Committee meetings tend to take place during the day, at least one reason may be the conflicting time demands faced by working parents. A Parent-Teacher Association has had trouble getting off the ground; again, not many of Landmark's parents have the time, resources, or language facility to easily participate. But, the principal says, "They come for the academic progress reports, they come for guidance conferences if they're needed, and they come for disciplinary conferences if needed. Absolutely, they respond."

College Acceptance and Success

About four out of five Landmark seniors attend college directly after graduation, and more typically plan to enroll in the following spring. Others enroll in vocational training, join the military, or go right into the workforce.

Landmark college counselor Daisy Fontanez-Lutsky keeps meticulous records on every student's postsecondary choices. Of the 53-member class of 1999, 74 percent went to four-year institutions, an increase of 10 percent over the previous year. Half the seniors headed toward four-year private colleges, and 24 percent went to four-year New York State or New York City colleges. Many Landmark students have gone on to selective institutions: Haverford, Antioch, Vassar, Sarah Lawrence, Bard, Hamilton, Fordham, Hunter, and Baruch. These acceptances occur despite the fact that in 1997–98, Landmark students, on average, scored below 400 in both the verbal and math sections of the Scholastic Assessment Test (SAT).

At this point, Landmark's evidence of student postsecondary success is largely anecdotal. Nevertheless, returning graduates report that their Landmark experience has given them excellent tools to succeed in college. "They come back to us and tell us they're doing fine, and they send us B's and A's," says Rabiner. "Our best students are doing extremely well, and even those who weren't as strong come back and say, 'The writing helps, I can understand a lecture, I can do a paper, I don't get panicked, I can sit for two hours, and I can meet a deadline.'"

A 1999 graduate who went on to Bard College reported:

Landmark basically gave me the tools that I need in order to be doing the work and be handling myself the way I am in college right now. The preparation we have is excellent compared to a lot of the other students. Presentations, class participation, and the portfolio system helped me a lot because now that I have

to write 10- to 15-page reports I don't have to stress or feel like I can't do it; I am accustomed to doing that.... The type of work that you put into it, revision, the type of presentation that is expected of you—it's all little things you carry with you when you go to college. And the sooner you learn them, for me, the easier it becomes.

A 1998 graduate who is studying at Bronx Community College to be a social worker said:

The writing skills helped me out. All you do is write, write, write. At school, people complain about 12-page reports. That's nothing! I could do it one day. Doing projects—that helped me.

Recent graduates commonly come back to Landmark to visit former schoolmates and teachers. For the past two years, a large number of them returned at Vivian Orlen's invitation to put on a Friday afternoon workshop for Senior Institute students about the college experience. "Some came long distances to speak to the students, and almost all of them were here. It was a remarkable thing, an extraordinary turnout," said teacher Carol Dispagno:

They get together and they facilitate the workshops—it could be how to survive dorm life or classes or assessment. They talk about the challenges: where they went off, what they learned they have to do over. I was astounded that they came back and spoke so highly of the school and how well they were doing, or some problems they were having. The first group of any school going through is the most turbulent group, so one was very curious to know what they would say, and they almost to the person came back if they were available.

Standardized Tests

Landmark students have done well on the reading, writing, and math Regents Competency Tests, which the state has long required as proof of minimal competency before graduation. For example, 82 Landmark tenth graders took the Regents Competency Tests in 1998; 86.6 percent passed in math, 92.7 percent in reading, and 81.7 percent in writing. In 1999, 67 students took them in math alone; this time, 91.7 percent passed. These pass rates compare quite favorably with those of other New York schools serving similar populations of students.

As noted, the State Board of Education is instituting more difficult standardized Regents Examinations in English, social studies, science, and mathematics, which will be phased in gradually over a period of years and which all students must eventually pass to graduate. State Education Commissioner Richard Mills has extended for one year the school's waivers on all but the new English Language Arts Regents test, pending his proposed state study of the effectiveness of the portfolio-based alternatives Landmark and its fellow schools in the Performance Based Assessment Consortium have been using.

Landmark staff are hoping that their graduation system will gain official acceptance, yet members of the consortium also object to the form of the state's proposed study: their assessments are already monitored closely, they say, by a review panel consisting of nationally known educators who specialize in performance-based assessment. More effective, they assert, would be a study contrasting a number of measures of success of Landmark students with those of a control group of comparable students in typical schools. Such a study could focus on results the school is achieving in a number of key areas: climate and safety, student engagement, teachers' professional satisfaction and growth, parental involvement, and college acceptance and success.

If Landmark loses its waivers, students will have to pass the expanded battery of exams in order to graduate. Faculty fear that their students, like those at other New York high schools, will not perform well on these tests. They have already seen their students struggle with the math and verbal sections of the SATs. Rabiner attributes students' low SAT scores primarily to a cultural background in which English is not the primary language and young people do not learn to overcome the inherent cultural biases of the tests. She observed:

> *The SATs represent cumulative experience over a lifetime rather than specifically during school, and for youngsters whose first language is Spanish—they're just at a disadvantage. They might have been in the country long enough to be able to read, write, and speak well enough that they don't qualify as Limited English Proficient, but it's still their second language. Then you have to look at their former education, the schools from which they come, the quality of instruction, the size of classes, the number of times they moved, and so on and so forth.*

What Next?

As part of the Coalition Campus Schools Project's strategy of "lateral accountability," teachers from other CCSP schools regularly take part in Landmark's Graduation Committees as outside assessors, giving an informal sense of the reliability of teacher judgments about student work. In addition, Rabiner brings in any expertise she can tap: a former Landmark teacher who is now a postdoctoral student at Columbia; a retired chemistry teacher who is an old friend; a former teacher at the Coalition School for Social Change who now serves as Landmark's special education supervisor.

In June 1998, Jacqueline Ancess from the National Center for Restructuring Education, Schools, and Teaching visited a round of Graduation Committees. Debriefing the teachers, she praised the quality of student engagement and understanding in the exhibitions, the young people's poise and rapport with the faculty, and the level of caring and sensitivity in the committee members' assessments. Then she asked the faculty to consider in the future a set of probing questions concerning its common standards, including:

- Are there benchmarks for student work that students and teachers can use to understand what constitutes work at different assessment levels?
- To what extent do faculty apply the same standards to student work?
- Are all students judged according to the same standards or relative standards?
- At the oral defenses, what are the ground rules for committee members' questions to the students?
- What are the mechanisms by which faculty members can hold one another accountable for ensuring high standards for portfolios for all students?

These will serve, Rabiner says, as ongoing questions for faculty to explore in the coming years. Landmark's staff already speaks with determination about the ways they want to improve their own and students' performance: "I think the areas for us to work on are rigorousness of the portfolio process and norming the portfolios to be sure there's not an easy committee and a hard committee, because I think that does happen," one social studies teacher observes, adding:

> *The challenge of the school now is to up the ante on the curriculum and to demand more mastery of content. A lot of what we do is very skill-oriented, like writing and revising—which is good, and there's a lot of development of kids, at*

least the middle- to upper-end kid, for instance understanding scientific method in science. So they're learning the skills of the disciplines. But I don't know how much content area our previous graduates have walked out with. This year, I'm pushing content a lot more, and it's forcing me to think of ways to teach kids to memorize, how to do more mundane work.

Teachers also agonize over whether or how they might adapt curricula and instruction to better prepare students for the SATs. We're concerned, one math teacher said, about the differences between the content tested on the SAT and the approach the Landmark curriculum takes:

We know they're doing something more advanced, and I think this encourages really good thinking skills that will help them with the SAT. But we know the students are scoring very low on the test. Maybe we could spread out some of the test topics over several years.

Rabiner reflects on the rigor of Landmark student work:

Given that most of our youngsters come to us from lower-income economic backgrounds, with probably not terribly good educations before they arrived here, very low reading and math scores on the whole. They are being pushed. Maybe they need to be pushed more; maybe they need to be instructed better. They do not come with a great work ethic; many of the teachers complain they don't do homework. Punctuality is a continuous problem. What's lacking here is some maturity. They're still young, they're not completely focused, they're very distracted by the distractions of teenage life as we all were.

Landmark teachers have staked their quest for rigor on the current school structures: its habits of mind, habits of work, and Graduation Portfolios. They see the looming Regents policy as hurting, not helping, that quest. One upper-level English teacher, interviewed a month before his students had to take the English Language Arts Regents exam, said:

We're now spending our prep time trying to come up with something that will work for Regents preparation, rather than looking at our students' papers so we can give each other suggestions.

A colleague is even more pessimistic:

[The English curriculum] is tough to adapt, but nothing compared to what the other disciplines have to do. I see it being a tremendous burden, if not impossible; I don't know how they can adapt. They have to change all of their curriculum, which is as challenging as ours. This will severely affect our school in a negative way.

Nevertheless, a sense of hopefulness shows up in teachers' reflections on their classes:

Global studies...was a challenge but...the students really did some important work this year. They learned basic things that are so important, like taking notes, paraphrasing—I must have spent hours teaching paraphrasing—formulating an opinion, and more. And I'm proud to say that some of them are just about portfolio-ready. With this class, the more I pushed, the more they worked. It was great.

"Jonathan now does every homework assignment," another teacher reflected:

> *Nelson reads his work out loud to himself before handing it in. Charisse now believes she can do math. Miguel admits he missed homework assignments. [Another] got three distinguished and two goods on her last report card. Greg can hit a jump shot. Jason made the honor roll. Dawn hands in work with fewer grammatical mistakes."*

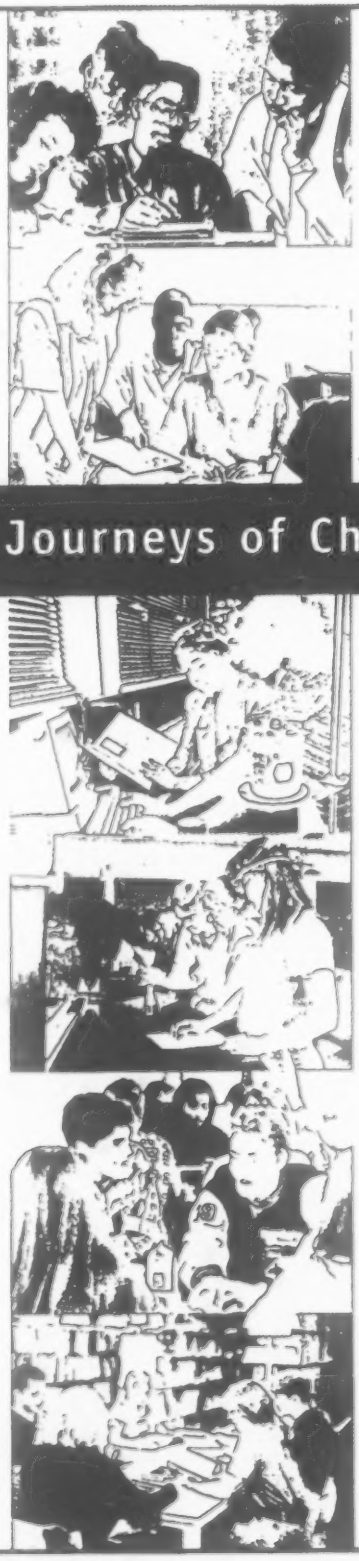
A close look at the individual stories of Landmark students reveals the difference the school has made in young people's lives more vividly than could any test score.

In fall 1999, for example, Carmen, a Landmark senior, filled out her college applications—just like thousands of high school seniors around the country whose teachers, like hers, considered them distinguished students capable of doing well in competitive colleges. Carmen had come to New York at age eight from the Dominican Republic; she was in bilingual classes through the eighth grade. Her father, a college graduate in engineering, is disabled from a work injury and collects Social Security; her mother speaks no English and stays at home with Carmen's two younger brothers. The family of five shares three rooms in Washington Heights. For Carmen to apply to colleges, much less visit them or attend them, all costs must somehow be waived.

When Carmen began studying physics as a Landmark freshman, her imagination caught fire. "The mystery of the stars and the unknown purpose they had in the universe attracted me," she wrote in her college essay. Since then, she has spent a scholarship summer at a high school program at Alfred University, where she was introduced to the use of a university-level telescope. The next year she was tapped by New York's Museum of Natural History for a selective two-year mentorship in which she worked with a graduate student at Columbia University. For a year and a half—in between her night job as an usher at the New Victory Theatre and her work on Graduation Portfolios—she has logged on to the Internet daily to conduct research on low-mass stellar objects. She cherishes an urge to learn more about black holes, she says; but that will have to wait for later:

> *In college, I am considering the possibility of majoring in astronomy or physics. Someday I hope to help towards the building of a spacecraft that could send humans up to space to explore territory yet uncharted. I want to learn everything I can about space and like a black hole suck all the information into my head and not even let the tiniest of details escape.*

Carmen's combined SAT scores do not exceed 800, and it is unclear whether she would pass the new state Regents Exams if she had to take them. Yet a week's visit to Landmark High School leaves the distinct impression that students like Carmen can and will succeed. Landmark High School did not organize Carmen's education around standardized tests. Rather, by centering her high school experience around genuine, supportive discourse, Landmark has taken advantage of and built upon her unique strengths: native curiosity, a dogged persistence, and the belief that even the stars could prove within her reach.



Rex Putnam High School
North Clackamas, Oregon

Reinventing High School: Six Journeys of Change

A Case Study of Rex Putnam High School
and the North Clackamas (Oregon) School District

Teaching the Teachers: Professional Development and Whole-School Change

By Cheryl Almeida

The turnout for the after-school meeting was promising, as teachers responded to the enticement of cheese, wine, and a relaxed atmosphere in which to look back upon decades of change at Rex Putnam High School. Even more satisfying was the afternoon's outcome: after hours of thinking, laughing, and reminiscing, the teachers produced a two-foot-by-three-foot "journey map"—a graphic representation of the twists and turns in a road they had navigated together, restructuring their school and substantially altering their approaches to teaching and learning.

In the months ahead, the teachers knew, Putnam would host teams of faculty and administrators from six other high schools around the country. That these visitors would want to witness and learn from Putnam's whole-school change efforts reflects just how far the school had come in its journey.

Rex Putnam is one of three comprehensive high schools in the North Clackamas School District, just outside of Portland, Oregon. The district also houses a regional professional-technical center that offers seven career strands for high school students. Most of the district's students are white (85 percent) and middle-class, although their socioeconomic status varies across schools, which are largely neighborhood-based.

While proud of the many changes that have taken place at Putnam over the years, staff members point out that understanding their school's progress also means understanding, first, the 1991 Oregon Educational Act for the 21st Century, and, second, what the school district has done to put the legislation's principles into action. Most important, the district has invested in a coherent, sustained professional development program for teachers. This case study reviews those district-level reform efforts, then focuses on how the Rex Putnam school community has reinvented itself by combining that support and pressure from above with its own initiative and innovation.

The District Moves into Action

Two critical events laid the groundwork for high school reform in North Clackamas: one was at the state level, and the other in the school district.

Enacted in 1991, the Oregon Educational Act for the 21st Century initiated a comprehensive, statewide education reform, raising the bar for student achievement to higher levels through new standards for K–12 and postsecondary education and through a new assessment system. Just as important, three years later, the legislature revised the law to address concerns that a greater emphasis on academic content and performance standards had to balance the original emphasis on career-related learning standards and career-related learning experiences (*see box*). During the 1995–96 school year, the state began working with districts and teachers to develop content standards, corresponding benchmarks, and assessments for the new education reform law. State-adopted standards and benchmarks would begin to arrive at the North Clackamas School District in the fall of 1996.

Revising Oregon's Education Reforms

As revised in 1994, Oregon's Educational Act for the 21st Century mandated:

- Newly revised content and performance standards and accompanying benchmarks;
- A statewide assessment system that required performance-based assessments at grades 3, 5, 8, and 10, including work samples and other authentic assessments to measure student mastery and progress;
- Newly revised, performance-based high school certificates for all students—the Certificate of Initial Mastery (CIM) and the Certificate for Advanced Mastery (CAM)—that changed the focus of credentials from completing courses to demonstrating competence;
- Career-related learning standards for high-performance competencies;
- That high schools provide career-related learning experiences; and
- The reorganization of high schools around focused programs of study—pathways in which broad career areas would provide a context for rigorous learning of academic and professional-technical knowledge and skills and high-performance competencies.

The second critical event was the appointment of a new school superintendent. Since taking over the district helm in 1995, Ron Naso has been a forceful advocate of instructional change and curriculum development.

During his first months on the job, Naso worked with his School-to-Career Director, Mike Kaiel, to embed that approach within a broader context of whole-school change, as called for in the state law. Naso also appointed a School-to-Career Task Force, charging it with defining a vision and preparing guiding principles for the district's school-to-career initiative for grades K–12. The broad-based, 35-member task force included district, school, and community representatives. As the results of its work indicate, the district has viewed school-to-career as a vehicle for creating whole-school change that emphasizes high standards, performance-based assessments, project-centered and in quiry-based instruction, and the expansion of learning beyond the classroom (*see box*).

School-to-Careers Vision Statement

1. **ALL STUDENTS** master rigorous academic standards, develop practical skills, and apply their knowledge through a variety of challenging and relevant learning experiences found in the classroom, the workplace, and the community.
2. **ALL STUDENTS** are prepared to continue education and training at the postsecondary level, competent to enter the workforce, and equipped to contribute as responsible citizens and community members.

School-to-Careers Guiding Principles

1. Use broad educational goals, not occupational requirements, to drive the curriculum.
2. Expect all students to meet high academic content and performance standards.
3. Require all students to demonstrate their knowledge, skills, and competencies through statewide tests and performance-based assessments.
4. Incorporate age-appropriate work-based and community-based learning experiences (including service learning) as a core element of the curriculum fc all students.
5. Increase integration of professional-technical and academic instruction.
6. Integrate career awareness, exploration and planning into K-12 curriculum and learning experiences.
7. Implement project-based approaches to teaching and learning.
8. Encourage thematic, integrated instruction across subject areas at all grade levels.
9. Establish broad, career-related, interdisciplinary programs of study for high school juniors and seniors that provide focus to their academic work.
10. Provide students structured pathways from high school to higher education and advanced occupational training through coordinated programs of study.

North Clackamas School District

A critical step in implementing the School-to-Careers Vision Statement and Guiding Principles fell to the Graduation Requirements Task Force, which Naso appointed in 1996. Its charge was to identify what students had to complete in order to graduate from high school prepared for college, employment, and the responsibilities of adult life.

Using the state law as a blueprint, this task force proposed notable changes in the district's graduation requirements, which the district's Board of Directors adopted in February 1998. To receive a high school diploma, students from the class of 2004 will have to:

- Earn 26 core academic credits (up from 22);
- Demonstrate proficiency (at the level necessary for a Certificate of Initial Mastery) on Oregon Statewide Assessment Tests in reading, writing, and mathematics, and score proficient or above on classroom work samples for speaking, writing, and mathematics;
- Select and participate in a focused program of study;
- Complete career-related learning experiences during sophomore, junior, and senior years; and
- Select, design, and complete a culminating senior project.

Growth of Professional Development

Many school systems have issued statements of lofty goals and introduced new graduation requirements; what distinguished North Clackamas was the presence of a growing number of professionals ready to "teach the change." Moreover, they already had begun a process of building capacity in the district's schools to implement the changes they sought.

The roots of North Clackamas's aligned and sustained approach to professional development organized around project-based, community-connected learning date at least from 1994, when the district created the School-to-Career Office to implement a comprehensive K–12 work-based learning program for all students. As director, Mike Kaiel initially focused on creating apprenticeship programs for the district's high schools. After a year of funding and promoting what he calls "more traditional" school-to-career activities (e.g., job shadows), he began to consider whether this approach to school change might have more potential.

Kaiel's thinking was influenced by participation in the Benchmark Communities Initiative, Jobs for the Future's five-year, systemic education reform initiative launched in 1994, as well as by his conversations with key district-level staff members. "I came to realize that the district had to create a foundation for successful achievement," Kaiel explains. "If what you did didn't change classroom practice, you would always be seen as an add-on. You would never be integrated into the life of the school."

The district arranged with Jobs for the Future to bring one of its "national faculty," Michelle Swanson, to North Clackamas to create a professional development program emphasizing contextual, community-connected teaching strategies.[1] During the 1995–96 school year, twenty-five teachers, representing the three high schools and four middle schools, participated in a pilot professional development group led by Swanson.

[1] In partnership with its national faculty of expert practitioners, Jobs for the Future delivered to five Benchmark Communities a structured sequence of professional development and coaching, directed at helping teachers design and implement challenging, community-connected projects. Swanson, a member of this group, was formerly a teacher at Sir Francis Drake High School, in San Anselmo, California. For more information on Drake High School, see "Staying the Course with a Reform Agenda," page 103.

Based on positive feedback from the teachers, the pilot grew during the 1996–97 school year to include 55 additional teachers, from elementary, middle, and high schools participating in professional development. By 1999–2000, the number of teachers participating in similarly structured, district-wide professional development led by Swanson encompassed over a third of all North Clackamas teachers.

This growth testifies to the enthusiasm of North Clackamas teachers—and to the results they began achieving in their classrooms. Participating teachers saw that a project-centered approach to instruction improved student attendance, perseverance, and task completion. "Teachers were energized and revitalized by the process," says Director of Staff Development Sue Shields, describing the first year. "They were committed and wanted to stick to it."

The training is designed around cadres, drawing about 30 teachers together for three intensive days over the summer and three full-day sessions during each school year, for a total of nine full days of training over the course of two years. In addition, lead teachers assigned to each cadre, as well as cadre members, work with one another to share and assess new projects and consider other teaching issues as they arise.

Some of the teachers in cadres serve as facilitators in their schools, promoting the use of school-to-career pedagogies among their peers. The teacher-facilitators also document teachers' processes of developing projects and assist the efforts of teachers and students to share their project work within their school and with the broader community.

Each cadre mixes teachers from various grade levels, all of whom commit not only to spending at least two years implementing project-based learning in their classrooms but also to linking their efforts with the state content standards. Teachers from each grade level bring different strengths, so they can share their expertise. Also, mixed teams begin to think about sequencing skill development in a coherent manner.

Throughout the pilot, Kaiel worked closely with Shields and Assistant Director of Secondary Programs Karen Phillips to ensure a cohesive and coordinated approach to professional development. Ken Noah, the district's deputy superintendent, also played a central role in the district office's willingness to "stay the course" with the approach. For example, the central-office team, working closely with Swanson, made important adjustments in the model as the school board considered new graduation requirements. They instituted the two-year cycle of professional development, responding to requests from teachers for a second year of assistance with implementing project-based learning approaches. The first year introduces teachers to current research, a variety of tools for project planning and design, and initial project implementation. During the second year, teachers expand and deepen their inquiry-centered practice and determine how to take the message home to their schools.

In addition to the two-year cycle, teachers can opt to participate in two other types of in-service groups. One type is designed for teachers who decide not to commit to the more extensive cycle. Drawing on study groups as a model, participating teachers meet four times a year for three-hour, dinner-and-dialogue sessions. These evenings introduce teachers to concepts and research supporting project-based, inquiry-centered instruction and provide opportunities to share project ideas and challenges.

A second new type of cadre—the "Action Research group"—is designed to address the growing pressure on teachers to show results in terms of outcomes for students, especially in relation to new content standards. Developed for teachers who had completed at least one year of professional development with Swanson, the members

of the group apply *research* techniques to guide *actions* that strengthen the connection between their practice and desired student outcomes. Teachers generally apply these techniques to data—e.g., student products, presentations, portfolio pieces—that assess student learning. Through this process, teachers expand and deepen their concept of what counts as evidence of learning, look at evidence about student learning, learn more about using project-based and inquiry-based approaches, and begin to build a body of data on the effectiveness of such approaches.

The third year of professional development, 1998–99, saw another change: the creation of an administrator group. As the number of teachers participating in cadres burgeoned, it became clear that this was a growing network that needed support from building leaders. Moreover, as the district pushed for further changes under the state education reform law, it became essential to send consistent, supportive messages to teachers. As a result, each time teachers met, a group of administrators, comprised of key leaders from the district office and schools, also worked with Swanson, who helped them think about ways to assist the efforts of teachers to improve their practice.

The administrative group served several key purposes:

- Keeping principals and district staff abreast of the cadre work;
- Providing a venue for informing administrators about changes in teachers' practices;
- Providing a venue for informing administrators about student products and exhibits resulting from teacher participation in professional development;
- Giving teachers a vehicle for communicating with school and district leaders; and
- Providing a forum to develop a shared understanding among leaders of how inquiry-based instruction and standards could be linked.

Aligning District Policy and Professional Development Practices

Many key elements of the state education reform law have harmonized with the reform efforts underway in North Clackamas (e.g., both emphasize high academic and performance standards, contextual approaches to teaching and learning, and performance-based assessments). Thus, the state law has served to strengthen and support district efforts to move beyond pockets of reform toward whole-school, district-wide change, and it provides a set of expectations and a framework to push for change at the school level.

This alignment did not come automatically. As the new standards, accompanied by benchmarks and scoring guides, began reaching teachers' desks during the 1997–98 school year, expectations that students would meet the new standards grew dramatically. Teachers began to fear that the demands of standards-based instruction would compete with those of project-centered teaching and learning. It became clear that district and school leaders had to align these two approaches, and the professional development process provided a forum for that. Director of Staff Development Shields explains:

> *As pressure to meet the state content standards grew, we knew we needed to more explicitly wed the project-based work and content standards, benchmarks, and performance tasks. The new standards and benchmarks required an integrated instructional strategy, so it was a nice fit. We don't expect teachers to do projects all the time, but it's important for them to include project-centered instruction in their teacher tool kit. We wanted all teachers to understand and use these strategies.*

One of Swanson's first steps to show that contextually based instruction could effectively meet standards was to require teachers in the professional development groups to identify which standards and benchmarks their project designs addressed. The professional development process was also a vehicle for helping teachers learn to design projects that incorporated performance tasks expressly and provided opportunities for students to produce work samples that met the state's benchmarks. The members of the Action Research group shared with other teachers projects that served three goals: they effectively addressed standards; they provided opportunities to practice performance tasks; and they met the "evidence test."

What may have gone furthest to alleviate teachers' fears was the sustained district support for project-based professional development. The district encouraged teachers to continue expanding and deepening project-centered and inquiry-based practices. "[The] district stayed with something long enough to create sustained change at the school level," says a teacher. "Too often, they bring something in, then it's on to something else. Here, they stayed through the nitty-gritty: How do you put it into action in the classroom? How do you know it's working? What do you do to make it work better?"

In February 1998, when the board approved new graduation requirements, it also sought to align its messages to teachers. As Karen Phillips explains, "The new graduation requirements sought to truly integrate what most teachers saw as different, discrete initiatives bombarding them from different places: state content standards, school-to-career, project-based learning, and graduation requirements."

A key topic of administrative group discussions was the challenge teachers encountered in struggling to implement projects and other innovative teaching practices in the face of the state's new demanding content standards and assessments. The discussions focused on a dual approach, defining and agreeing on administrative solutions that would directly address teachers' concerns (*see table*).

Table: A Dual Approach to Sustained Change

Teacher Concerns

- Providing contextually rich, project-based curricula while simultaneously "covering it all" and "hitting every benchmark" required by Oregon state's education reform law
- Providing students with multiple opportunities to practice and achieve standards through the use of performance tasks, as required by the law, and at the same time designing authentic, meaningful projects
- Need for direction and clarity from school and district administrators to cope with the constant flux that resulted from the state's unfurling of the education reform law
- Questions about support from district and school leaders for curriculum integration and teacher teaming, strategies teachers felt were key to students' achieving the new standards

Administrator Actions

- Meeting with teachers participating in professional development to validate their work, support a project-based approach, and ask how leaders could help
- Working together at a school level to decide which content standards are a priority, and clustering standards in a way that makes them more manageable
- Identifying and disseminating projects that have been mapped to standards, provide opportunities to practice performance tasks, and meet the "evidence test"

One School's Change Efforts

Nestled among towering pines, Rex Putnam High School is a well-kept, sprawling, two-story building. Most of its 1,350 students are white (88 percent). The remaining students are Hispanic, Asian American, African American, and Native American. About seven percent of the students receive special education services; two percent are identified as limited in English proficiency; about 10 percent qualify for free or reduced-price lunch.

Lead practitioners at Rex Putnam trace the origins of their school's journey to the early 1990s, when it established a Site Council following the enactment of the Oregon Educational Act for the 21st Century. Comprised of teachers elected by their peers, other staff, parents, students, and an administrator, Rex Putnam's Site Council helped set the school on a course to a more participatory form of governance. It continues to meet regularly, examining school-based data as a basis for establishing yearly goals and action plans. Moreover, it provides a strong voice for the school at large: council recommendations usually become school policy.

One of the Site Council's first important acts, in 1993, was to initiate a comprehensive, community-wide survey on a range of school-related academic and social concerns. The goal was to gather the perceptions of all the key stakeholders in the school: students, staff, parents, and community members.

The survey revealed some stunning disconnects dividing most of these stakeholders from school staff. For example, most of the stakeholders believed that students were not achieving to their potential. Students felt that many of the staff did not care about them. Parents felt uninformed and uninvolved with decision making at the school and believed that staff failed to connect with students in meaningful, relevant ways. In contrast, staff believed that students felt valued, the curriculum was relevant, and that parents failed to pay enough attention to their children's academic success. The only point of consensus among teachers and parents was that drug and alcohol use had escalated and needed more attention from the school.

Although disheartened by the findings, Putnam staff marshaled their resources and sought to address the problems. They began by reviewing several years of school data, yielding additional telling discoveries: dropout rates were increasing; absenteeism was on the rise; and the number of Fs earned by ninth and tenth graders was unacceptably high. The next step was to study examples of best practice, a process that included visits to other school districts around the country. A number of Rex Putnam's many significant organizational and structural changes can be traced to what the school community learned from this research.

Perhaps the most important structural change has been the introduction of a schedule allowing for longer periods of instruction. In the new schedule, students take a total of eight classes, with each class meeting every other day. This means that students attend four 87-minute class periods on any given day. The district supported this innovation with professional development for teachers that focused on strategies for using extended time periods.

To address a concern that all stakeholders shared, Putnam has hired a half-time drug and alcohol counselor to intervene and support at-risk students and families. It also put in place a referral-and-contact system to outside social services and other supports.

To foster meaningful and personal relationships between teachers and students, the school established an "Access" period. Small enough to create the sense of community that has been shown to promote learning, Access groups are comprised of about 15 ninth and tenth graders, with a teacher as facilitator or "house teacher." Every ninth and tenth grader is a member of an Access group that meets every other day for one school period. To provide continuity, students remain with an Access group and teacher for two years. During Access period, students can discuss concerns with their peers, meet with the facilitator or other teachers or counselors, and use the school's labs and libraries to work on assignments or projects.

As an additional benefit, Access has increased Putnam's ability to guide and manage the production of student "CIMfolios," the portfolio system required by Oregon's education reform law and connected to the award of a Certificate of Initial Mastery (*see box*). The state's new assessment system combines statewide, performance-based assessments in the third, fifth, eighth, and tenth grades with a portfolio of work samples that "meet benchmark." By the end of the sophomore year, a student's CIMfolio must contain three writing samples, three speaking samples, and two open-ended samples of math problem solving that meet benchmark. The district adds a requirement of one sample each in science and reading.

With the introduction of the CIMfolio system, a logistical nightmare quickly developed at Putnam and other Oregon schools: figuring out how to maintain student portfolios that documented opportunities *and* success in performance tasks across multiple disciplines. To solve this problem, Putnam expanded the Access program: a student's house teacher can also be the CIM Manager—an arrangement that provides critical time for CIMfolio conferences among students, teachers, and parents.

Managing the CIMfolio

Every Oregon public school student has a confidential CIMfolio that tracks his or her progress and provides a record of attempted work samples and examples of those that "meet benchmark." Work that gets a proficient or better rating counts toward the student's attainment of the CIM. This work, along with progress notes and scores on state assessments, goes in the CIMfolio, which is kept in a school's Career Center.

The "CIM Manager" is responsible for meeting with each of his or her assigned students several times during the school year to review and discuss progress toward achieving the CIM. CIM Managers also meet with students' parents or guardians twice a year, in addition to being available to review progress via telephone or written contact.

A Focus on Teaching and Learning

Deno Edwards, the principal of Rex Putnam, attributes major changes in the school's culture of teaching and learning to his staff's broad participation in the professional development cadres. Under his leadership, over 50 percent of Putnam's staff participated in professional development groups on project-based and inquiry-centered instruction between the 1995-96 and 1999-00 school years.

The professional development experience has provided Putnam's teachers with "a new language for talking about teaching and learning," says Edwards. He explains the difference between the professional development groups and typical teacher in-service training:

> *We keep telling teachers we don't want them to keep teaching students in the traditional lecture format, so why do we keep teaching teachers that way? With Michelle [Swanson] it's different. She does the "wow" part but is always building relationships with the teachers from the beginning. She comes back and works beside them, guiding them through their trials and revisions until they emerge as more confident, innovative teachers.*

According to Edwards, the teachers exiting from this process are adamant advocates for change. They believe in the instructional approach taught by Swanson because they have seen it succeed in their own classrooms. They have come to realize that by working together and integrating curriculum through a project-based approach, they get far better products from students (*see boxes for examples of teacher projects*). Putnam Teacher Jill Colasuonno concurs:

> *It has given me tools that I can put into action in the classroom. The bottom line is that the kids are getting excited about using their brains. They are beginning to get that thinking is a good thing, not just a painful thing. Ideas are generated in Michelle's groups. Projects are designed and worked through with the kids. I've found a new level of motivation among my students and myself because the projects are more authentic.*

Nature Trail Project

Acres of blackberry vines and wild vegetation surround Rex Putnam High School. Special education teacher Candace Churchley saw this unused land as an ideal opportunity for a project addressing a pressing environmental concern: an alarming rate of destruction of bat habitants in northwest Oregon. Students could restore the habitat around the school while learning valuable lessons in environmental science, biology, civics, mathematics, and communication.

Students began by investigating bats—their habitat, ecosystems, and status as an endangered species. The students constructed a nature trail around the campus, then turned their attention to restoring wildlife habitats along the trail. A bat keeper from the Portland Zoo gave them expert advice on restoring the bat population. Students built and placed bat boxes along the trail and studied and planted vegetation indigenous to the area. To keep the project alive for future generations, they created and taught lessons on bats and their habitats to elementary school children.

The students also researched county laws and ordinances, contacted businesses for donations of plants and materials, and enlisted the aid of AmeriCorps volunteers and of students from other classes. Students in the wood technology class built an impressive pergola to mark the trail's entrance.

Over two years of hard work, students saw their vision become a reality when they celebrated the nature trail's grand opening. Students led guided tours, pointed out native vegetation and wildlife habitats, and answered questions from invited guests. The nature trail remains open, maintained by Rex Putnam students.

Signs of Our Times Project

In American Studies , a double-period, team-taught class integrating U.S. literature and history, students research a historical period by following the threads connected to a personal family item. Students select an item from their family's history and interview a family member who knows about that item.

This interview becomes a springboard for students to look at their families' histories in relation to national and international contexts. The students present the family items to their peers in visual displays and teach the class what they learned about their families and the broader historical contexts. When the presentations are complete, students reflect in writing on their own learning.

The first year teacher Jill Colasuonno tried the project, her students' motivation and energy affirmed the project's relevance, yet she questioned its rigor: students did not appear to go deep enough into the learning. Over the next few years, she increased and restructured writing assignments and assessments. Students now must record their progress in a journal weekly. They "self-assess" the project's various components—research, preparation, and presentation—and conduct peer assessments. Moreover, she demands more of students in the reflection paper, asking them to consider what they learned from the research, from their families, from presenting, from listening to others, and from monitoring their own progress. In other words, students take more responsibility for their learning.

The Evolution of GATE

For Putnam teachers, the most dramatic result of professional development was the creation of Gaining Access to Excellence—GATE. This program blends two academic years and integrates coursework in language arts, science, and social studies. GATE freshmen and sophomores come together for classes in these disciplines during the first two-period block of each school day.

GATE's evolution ties directly to the participation in professional development cadres of its founders: language arts teacher Cindy Quintanilla, social studies teacher Joel Mobley, and science teacher Casey Clegg.

Quintanilla and Mobley joined the professional development groups during the 1996–97 school year at the urging of Principal Edwards. They knew one another only informally before they began to collaborate in the group, yet both were drawn to the project-based, inquiry-centered approach. Guided by their work with Swanson and encouraged by an administration supportive of risk taking among its teachers, Quintanilla and Mobley piloted a program that year that integrated social studies and language arts, with 60 Rex Putnam sophomores.

Quintanilla summarizes the results of their first tentative steps at integration:

> *That first year was bumpy but not without its small successes. We knew that the students were making connections between the subject matter and their own lives, and we knew that the projects the students were engaged in allowed some of the creative freedom that they needed. Because of this first successful step, our district and building administration allowed us to take the next step the following year: a fully integrated program.*

During the spring and summer of 1997, Quintanilla and Mobley began to develop the GATE curriculum, galvanized by working with Swanson and their colleagues, encouraged

by their first efforts at teaming and integration, and inspired by a visit to the ROCK program at Sir Francis Drake High School in San Anselmo, California. ROCK (an acronym for Revolution of Core Knowledge) is a two-year program for ninth and tenth graders that integrates science, English, history, social issues, art, and technology.

Quintanilla and Mobley also invited Clegg to join the team. Clegg recognized the benefits of teaming and was enthusiastic about the opportunity to collaborate with his peers:

> *It sounded like a good idea just to be working with other teachers and sharing students. I felt so isolated. I had participated in the district's professional development groups the year before. I tried projects and had some successes but lots of failures. I felt that just working with other teachers and other subjects we have more of a chance for success.*

Based on their reading of education research, the visit to Sir Francis Drake, and their participation in the professional development groups, the team drew several conclusions about the value of an integrated model:[2]

- A natural marriage exists between social studies and language arts.
- Shared assignments and class time allow for greater flexibility and increased depth in the design of projects.
- Integration supports writing across the curriculum.
- Integrating subject matter reveals the relevance and connection of academic content to real-world situations.
- Students can build a sense of community, providing a foundation for the remainder of their high school years.
- Teachers can model cooperation and collaboration for their students, important skills for future success.

At the opening of the 1997–98 school year, Quintanilla, Mobley, and Clegg launched GATE, with 79 Rex Putnam freshmen and sophomores. The GATE teachers plan their lessons together, making explicit connections among the three subject areas. Each marking period, students participate in a combined project that integrates the subject matter from all three classes (*see box*).

Taking Part in Urban Development: The McDonald's Project

To anchor the GATE unit on urban growth, the McDonald's Project required students to propose new locations for the fast-food chain's restaurants. Students learned about zoning laws and studied environmental issues surrounding urban development. They also studied traffic flow and congestion. McDonald's provided information on the policies and procedures around restaurant siting and related zoning and development issues. McDonald's also gave students access to computer studies on demographics. Students visited the local McDonald's corporate headquarters and local restaurants. Several students presented proposals to a board meeting held at McDonald's corporate headquarters.

Addressing Standards

GATE's launching at Putnam coincided with the district push for higher standards. To meld their project-based, inquiry-centered approach with standards-based demands, Quintanilla, Mobley, and Clegg developed a matrix to identify and track the content

[2] Adapted from Cindy Quintanilla's June 1998 report: *Action Research: Turning Teacher Intuition into Solid Evidence. A Pilot Program for High School Integrated Studies.*

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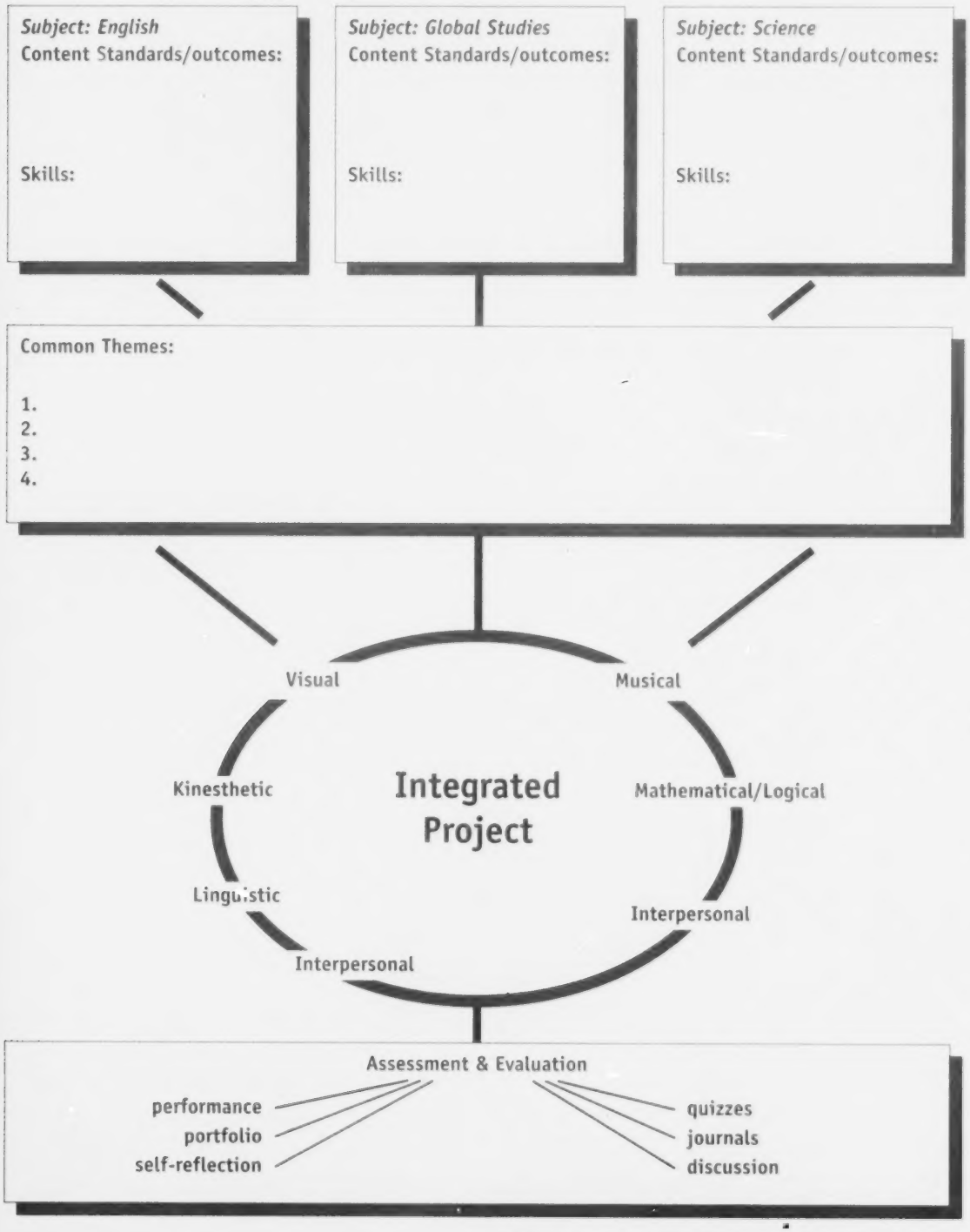
standards and benchmarks that each curriculum unit addressed. Similarly, when designing a project, the team began by looking at the content standards and the benchmarks that they wanted students to achieve (*see figure*). The team builds projects around these standards and benchmarks.

Creating Integrated Projects



Finally, the team developed a "Content Standards Checklist." Students use the checklist to determine which standards they meet through each project or other assignment. The checklist has proven to be a powerful tool to help students understand the purpose to assignments. In addition, it provides students with a concrete measure to track progress on standards and gives them more responsibility for their own learning. For teachers, it is a design tool that helps the team see where it needs to supplement the curriculum to meet standards.

Compelling Evidence Expands District Support

The GATE team members recognized their good fortune in starting a program with strong administrative support and ongoing opportunities for professional growth. They recognized that this combination provided an excellent opening to assess GATE's effectiveness from the beginning—and to adapt and revise the program based on solid evidence. Consequently, for the 1997-98 school year, Quintanilla, Mobley, and Clegg joined the district's Action Research group.

The team's research has yielded compelling evidence that the integrated approach results in solid academic achievement. For the first year, the 1997-98 school year, over three-quarters of GATE students improved or maintained their grades in language arts and science compared to the previous year (80.2 percent in language arts, 75.5 percent in science). At least a third of the students improved their grades (44.5 percent in language arts and 35.2 percent in science). Conversely, the failure rate in GATE's language arts classes was only 4 percent; it had been 16 percent for students in Quintanilla's "traditional" sophomore language arts classes the previous year. Remarkably, all GATE students completed their integrated projects.

The science results were especially heartening. For one thing, GATE ninth graders took biology, a course typically taught in the tenth grade (with some exceptions for highly science-motivated freshmen). Moreover, the results covered only the ninth grade, traditionally a difficult transition year for students, with frequent *decreases* in grades.[3]

The results for social studies were impressive as well. Over 90 percent of GATE ninth graders either improved or maintained their social studies grades compared to eighth grade: 59 percent improved, and 34.1 percent maintained their grades. Mobley, the GATE social studies teacher, attributes the results to the blending of ninth and tenth graders and to the project-based approach to teaching and learning:

> *I think it helped that the classes were mixed. The level of social studies was raised, so the freshmen got what we normally would teach in the sophomore class and we challenged the kids. They met the challenge. Of course it's really a combination of the whole process...the mixed classes and the freedom of projects. I think there are a huge number of kids who succeed better when you give them the freedom to go and use their skills and knowledge to create something meaningful.*

The GATE team attributes these results to a number of other factors as well. First, each of the team members had chosen to be part of the effort, and all were solidly committed to collaboration and a cross-disciplinary, project-based curriculum. Equally important, they had ongoing opportunities to expand, refine, and improve their practice through participation in the professional development groups. Finally, they were absolutely clear that success depended upon the strong support of their

[3] No GATE sophomores had been enrolled in science or social studies courses during their freshman year.

principal. Edwards had provided them with regular common planning time and made a "pure" program possible by arranging their schedules so that they all taught the same students as part of GATE.

For that first year, Edwards could approve GATE as a pilot; full program standing, though, required the sanction of the district superintendent and school board. However, the district, in the midst of an aggressive push to implement the education reform law, might be wary about supporting a program that was ahead of the district-wide effort. Undaunted, the GATE team made a presentation to the superintendent and school board, bolstering it with the strong, first-year data. The superintendent and school board heartily endorsed a second year of implementation.

Replication at the Home Front

GATE's success also generated wider interest within Rex Putnam. The evidence of student achievement was strong, and teachers could see that the collaborative team approach provided additional benefits even as it created additional work. Yes, the GATE teachers collaborated on their assessments of their students and designed and implemented several fairly large-scale, cross-disciplinary projects, but they also shared a common preparation period to meet and plan. Moreover, the integrated approach allowed teachers to address several standards in one project, and it made managing the required CIMfolios much easier.

By spring 1998, three more teachers from the professional development groups were eager to replicate the GATE model. These teachers met over the summer to plan a curriculum, design projects, and address logistics. A third team also expressed interest but decided to devote the 1998–99 school year to exploring and planning before moving forward.

However, both teams faced a major hurdle. While the district approved the continuation of GATE, it had major concerns about endorsing its replication. First, the state's standards, benchmarks, and scoring guides for secondary school social studies were still in draft form at the beginning of the 1998–99 school year, and the state had not finalized course requirements in social studies. Its only firm decision was to require geography in the ninth grade; the model's second year, the tenth grade, was still in question.

Likewise, the Graduation Requirements Task Force was in the midst of issuing its recommendations aligning course demands with state requirements. One proposal was for three years of social studies for graduation, with one and one-half years completed by tenth grade. Any realignment of social studies curriculum to address state requirements would become that much more difficult because of the two-year, ninth/tenth-grade blended design of GATE. Half of GATE students are sophomores and half are freshmen. GATE addresses the ninth- and tenth-grade coursework requirements—but in two-year cycles.

Further, North Clackamas is a neighborhood-based school district, with no school choice. Because parents want their children to have equal access to learning experiences, the school district has had a long history and commitment to uniformity among the schools. This was so ingrained, according to one long-time administrator, that staff would "spend an eight-hour day out of the classroom trying to decide what to name courses so that they were consistent across all three high schools."

When Naso became superintendent, though, the philosophy of strict uniformity shifted to district-level consistency without building-level uniformity. "We want to

ensure we have consistency where need it," explains Karen Phillips. "For example, everyone has to teach to the standards, but they also have enough flexibility so that all the schools and programs do not all look the same."

Phillips recommended that the district provide clearer parameters to the schools—this is non-negotiable, and this is flexible—and that both district and schools practice greater flexibility and compromise. Then, schools could move ahead with their efforts while the district had time to hammer out implementation details for the state reforms.

At Rex Putnam, some teachers appreciated the district's concerns regarding standards and graduation requirements, but others questioned the district's motives, especially since central-office flexibility had been the exception historically. Even more important, they felt they had made important progress in line with the demands of the state reform law, and they bristled at the brakes placed on their efforts by the district and the state. Principal Edwards bemoaned the loss of a significant "teachable moment" and teacher Jill Colasuonno expressed the feelings of her colleagues:

> *Support for innovation is fairly strong among the staff. There's enough buy-in that staff as a whole is ready to move. The district and state are putting on the brakes. Decisions need to be made before we can move on. But we have to move before frustration gets so high that it all falls apart. I'd like to be part of a house [i.e., small learning community] just because you can cover all the darn standards and can have fun too.*

In the end, compromise and flexibility prevailed. The district allowed the three teachers from the "replication team" to pilot a piece of the GATE model. They were assigned a common group of students for one of their tenth-grade classes and received time to plan some integrated curriculum units and projects. Moreover, plans moved ahead for all three high schools to begin organizing ninth and tenth graders into "houses" or "small learning communities" for the 1999–00 school year. GATE would serve as an important model, but teams would also have flexibility in designing their houses to ensure they had full ownership of the resulting programs. The GATE experience allowed Putnam to move forward more quickly than its sister schools in providing a "house" experience for all ninth and tenth graders.

GATE's Second Year

As planning began to organize all Rex Putnam freshmen and sophomores into houses, GATE entered its second year in 1998–99, operating at full capacity.[4] At the same time, the ongoing implementation of state education reforms placed ever-increasing demands on teachers.

The Putnam staff struggled to determine how many students and for which standards each teacher could realistically manage the CIMfolio process, and the GATE team stepped up to the plate. Because of the organizational and teaching advantages of the team approach, the team offered to manage the portfolios for all 90 GATE students across all standards—over twice as many per teacher as their colleagues.[5] The logistics of implementing the reform law were making the GATE model ever more appealing for organizing the ninth and tenth grades.

[4] GATE is open to all students. In the event more students are interested in the program than the 90 seats available, selection is based on creating a balanced heterogeneous group.

[5] The other ninth and tenth graders were assigned a teacher, counselor, or administrator as CIM manager. These staff were responsible for 10 to 15 students each.

Still, the ultimate concern was for the success of the program's students. The GATE team firmly believed in the advantages of their ninth- and tenth-grade blended design. Returning tenth graders acted as "disseminators of the culture" of the classroom and conveyed the expected standards to incoming freshmen. Spurred by peer pressure, ninth graders sought to master the standards and compete on a par with the tenth graders. Likewise, the idea of being "shown up" by ninth graders added an incentive for tenth graders to do well. Finally, the team used the same assessment tool—the tenth-grade scoring guides—to assess standards-based work for both ninth and tenth graders.

Quintanilla, Mobley, and Clegg were convinced that the GATE approach provided more opportunities for students to complete performance tasks. Moreover, the increased opportunities, coupled with a team approach to assessment and task design, would improve the likelihood that students' work samples met the required benchmarks. Maintaining their commitment to evidence, the team members set out to gather data to test their beliefs, rejoining the Action Research group for the 1998–99 school year. During the first semester, they collected information on the number of work samples attempted and the number that met benchmark in writing, speaking, math, and reading for the 39 sophomores and 50 freshmen enrolled in GATE. They compared this information to data for a random sample of 39 sophomores and 50 freshmen in traditional classes.

In almost all content areas, GATE students had more opportunities to create work samples; consequently, they had more work samples that met or exceeded benchmark.[6] In most cases, the *percentage* of total work samples that met benchmark was similar between the two groups, suggesting that the difference was one of opportunity, not ability.

The one exception was math, which wasn't part of GATE. There was little or no difference between the two groups in the number of math samples attempted or meeting benchmark for both the ninth and tenth grade groups.

Student Views on the GATE Experience

"What I thought was different about GATE was that we knew our teachers better than most. I mean, if I needed something, I always knew where to find the teachers and I didn't feel stupid asking for help."

"I really think the GATE program helped everyone...in terms of working in groups with people you never really talk to, and getting rid of the nervousness of presenting in front of an audience."

"Having the same teachers for two years in a row has been great. I have gotten to know them so I'm not afraid of what they will think of me when I walk into a room or give a presentation or even just ask them for an assignment if I missed a day."

"Compared to non-integrated classes, GATE is good because the teachers know what the other is giving [by way of homework]. The teachers communicate with each other, where the rest of the teachers will give me homework and not know what the other teachers are giving out. It has been a positive experience because we do projects with all the other GATE classes. We work more as a group rather than as individuals. "

[6] This data was reported in "The GATE Program, Rex Putnam High School. Research Results and Reflections. May, 1999," submitted by Quintanilla, Mobley, and Clegg as part of their work in the Action Research group.

Professional Development Shifts Teaching and Learning

Just as the district's professional development groups had a dramatic impact on the design, refinement, and expansion of GATE, this career enhancing experience inspired other Putnam teachers as well. It reaffirmed the value of teaming and cross-discipline integration for those who had supported such approaches, and it helped prepare other teachers to move toward integration and collaboration.

As principal, Deno Edwards has sought to nourish these sentiments by gently urging his faculty to team teach and by providing the supports that make it possible for them to do so. His school-to-career coordinator, Claudia Holstrom, a well-liked and highly respected former Putnam teacher, has been instrumental in fostering teacher innovation and collaboration.

A number of other factors have contributed to the increase in collaboration and teaming among teachers at Rex Putnam High School. These include the:

- Support of the administration, especially the leadership of Principal Edwards and the guidance provided by School-to-Career Coordinator Holstrom;
- Benefits of collaboration that teachers experienced in the professional development groups;
- Recognition that the demands of the education reform law—achieving benchmarks, performance tasks, and work samples—become much more reasonable with discipline integration and teacher collaboration;
- Visible success of GATE; and
- Commitment of school leadership to hiring teachers who embrace teaming and collaboration.

With Holstrom providing classroom support, Edwards has pushed for curricular integration across content standards and career-related competencies, yet he recognizes that forcing teachers to team teach often defeats the purpose of a team approach. Consequently, he lets teams emerge according to the teachers' readiness, interests, and experience:

> *I expect teachers to integrate curricula, but the level of "teaming" is up to the teachers. How it plays out is up to the teachers involved. For example, one of the American Studies program's [an integrated social studies and language arts course] teams almost always team taught their students. Their curriculum was very integrated, they planned all their units together, and they jointly assessed all student work. The other team had very integrated curriculum but almost never team taught it.*

Teachers Take Charge

In the summer of 1998, as the pressure increased on teachers to achieve state standards and develop the performance tasks required for the Certificate of Initial Mastery, three teachers—Quintanilla, Kathy Campobasso, and Kathleen Walsh—and Holstrom approached Edwards with a proposal for the district-mandated four days of professional development that took place at the beginning of each year.[7] The teachers and Holstrom had all been elected to the Site Council by their peers. They had also participated in professional development groups and found them instrumental in helping develop the confidence, knowledge, and skills teachers required to step forward at this critical juncture in the school's life. Their request, recalls one teacher, was: "We know what we have to do here. We know what the teachers want and need to know. Let us tell them. Just let us do this."

[7] The district required all teachers to participate in four days of professional development, but each school could decide how to use the days.

Reflecting his belief in shared leadership and trust in his staff, Edwards assigned the design and implementation of the four days to this team of teachers. Rex Putnam was the only North Clackamas school to give teachers full responsibility for the professional development days. As Edwards explains:

> *My approach is "We're all in this together." Teachers need to be in leadership roles inside the building. I see us principals as an asset to them and a resource to them. We get things done for them. It's real important that teachers have ownership and make decisions. Teachers can and should go out and get new expertise, but they need to come back and share their learning with their colleagues. Teachers come back and convey, "I think its workable. Here's how I did it in my classroom. Here are some pitfalls to look out for. Here's some solutions and answers worked for me."*

Quintanilla, Campobasso, Walsh, and Holstrom began by assessing their colleagues' understanding of the requirements of the state reform law. Based on the results of a district survey conducted the previous spring, the team examined teachers' knowledge of the state's content standards, assessment tests, and scoring guides, and of the design of required performance tasks. They next designed workshops based on addressing the identified staff needs, the components of the standards movement (e.g., state tests, standards, work samples), the use of scoring guides, the CIM requirements and timelines, and the development and use of performance tasks. The four days set a tone of collaboration, teacher leadership, problem solving, and forging ahead with systemic changes for the school year. Teacher comments underscored their appreciation for professional development led by colleagues who had an intimate understanding of the needs and culture of the school. "Thank you so much for getting the information to us in the way you did," said one teacher, adding "You were specific, thorough, direct and efficient. I'm sure having teachers present this information to us made it somehow more acceptable!" Another teacher added: "This was the first time I felt successful to any degree in understanding the big picture as well as the details."

Opening Doors

With this history of progress, Rex Putnam teachers prepared to help other educators across the county who wanted to learn from their experience. In spring 1999, Putnam applied to become one of the U.S. Department of Education's New American High Schools (NAHS).[8] To win this prestigious designation, Rex Putnam had to satisfy rigorous data requirements demonstrating that its students met the challenging academic standards and high-performance skills necessary to succeed in postsecondary education and careers. In addition, the school had to show evidence it had implemented a set of 12 NAHS strategies or key practices. These included, for example: creating small, personalized, and safe learning environments; offering rigorous and relevant curricula; and providing students with real-life experiences to learn about postsecondary opportunities.

That fall, Rex Putnam became a New American High School. As such, it was asked to open its doors to staff from other high schools that were tackling the challenges of whole-school reform. Rex Putnam honored this request by hosting its first "Design Studio" in November 1999 and another in April 2000.[9]

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[8] Jobs for the Future, as part of its Connected Learning Communities Initiative (successor to the Benchmark Communities Initiative), suggested that Putnam apply for the NAHS designation.

[9] Design Studios are an element of Job for the Futures Connected Learning Communities Network. As a member of this network, Rex Putnam received training and the technical and financial assistance necessary to hold a successful design studio.

Design Studios attempt to maximize the impact of school visits, both for the hosts and the observers. The primary purposes of a Design Studio are to deepen the understanding, in both the host and visiting schools, of key design principles in action, to provide the host school with an opportunity to gain useful feedback and promote continuous improvement, and to enable the team from the visiting school to use what it learns in creating its own action plans. Over the course of two or three days, visiting teams engage in a strategic planning process.[10]

Attended by teams from three West Coast high schools, Rex Putnam's first Design Studio focused on the school as a professional learning community, personalizing learning through blended ninth/tenth-grade small learning communities, and aligning district and school policy to support reform. According to Holstrom, the Design Studio went very well. "On a five-point scale, our overall rating was about 4.7." Rex Putnam plans to host two more Design Studios during the 2000–01 school year.

As the staff members of Rex Putnam High School prepare for their second year of offering Design Studios to others, they maintain a commitment to whole-school change and continuous improvement. The school sees itself as a "work in progress," with much accomplished but a long mile left to walk.

The district, too, has continued its aggressive approach to school reform and the implementation of the state education reform law, and it has maintained its commitment to aligning district policies and priorities with professional development practice. As the law unfolds, the district adapts, refines, and expands its professional development strategies to ensure that the support necessary to achieve these priorities is in place.

Implementing the mandated six focused programs of study and providing the required career-related learning experiences are top priorities for the district in the upcoming years. These focused programs of study are broad, career-focused programs that address requirements of the state's Certificate of Advanced Mastery. Broad career areas, such as arts and communications, business and management, and natural resource systems, provide a context for rigorous learning of academic and professional-technical knowledge and skills, as well as for mastering high-performance competencies.

In 1998–99, holding true to its commitment to align district policy and professional development practice, the district began supporting teams to design the six focused programs of study. Each team, with one team for each program, was composed of teachers, administrators, school-to-career coordinators, and business and community representatives. The district will implement coursework and organizational structures for the FPSs during the 2000–01 school year.

During the 1999–2000 school year, the district also supported the efforts of a career-related learning experiences (CRLE) design team. Composed of six teachers, this team worked with district staff and Rob Riordan, a national expert on the design and operation of career-related learning experiences. The teachers spent the first half of the school year developing models for career-related learning experiences, which they then shared with twelve other teachers who have agreed to offer career-related

[10] The design studio model was developed by the Metropolitan Career and Technical Center, an innovative Rhode Island high school. Because of its reputation as a very "break the mold" kind of school, the Met found itself inundated with visitors and constrained by the traditional "show and tell" nature of a school visit.

learning experiences to their students during the spring semester. All three comprehensive high schools and the regional professional-technical center are slated to implement CRLEs during the 2000–01 school year.

Sustained professional development has resulted in a critical mass of North Clackamas teachers and administrators who are bringing about reform at the school level through changes in the nature of classroom teaching and learning. North Clackamas seems to have discovered an effective combination of grassroots support and top-down commitment. As a district administrator points out, "Our commitment to a sustained [professional development] approach evolved over time. We committed to the approach precisely because it had been so successful."

Each year, the number of projects has increased, and the quality of project-based learning has deepened. Support among teachers, principals, and district staff has grown as a result of the growing visibility of teacher-designed projects and exhibitions of student work, along with the strong evidence provided by members of the Action Research group that project-based and inquiry-centered instruction is a viable way to meet new state content standards. Change within schools has helped promote and support district-level reform; in turn, district support has been critical to enable school-based reform to deepen and expand.

Reinventing High School: Six Journeys of Change

Sir Francis Drake High School
San Anselmo, California

A Case Study of Sir Francis Drake High School
San Anselmo, California

Staying the Course With a Reform Agenda

By Larry DeSalvatore

The visitors drift back into the meeting room in groups of two or three, talking animatedly about what they've seen. These educators have spent the day at Sir Francis Drake High School, visiting classrooms, observing students, and talking with teachers. They've seen students' exhibits of balsa-wood bridges and heard them clarify the physics principles implicit in their designs. They've observed students working on an endangered species project using computer presentation software. They've viewed student-made videos created as campaign ads for candidates and as ballot propositions for a local election.

The educators have also talked with students about their learning, and it is this that has the visitors buzzing with excitement. Several people comment on the students' eloquence, their ability to articulate what they are learning.

Even so, the guests are unprepared for the day's culmination. Entering the meeting room, they sit at several large, round tables. Soon, students join the adults at the tables. The young people have brought with them pieces of work of their own choosing, and they are prepared to discuss the ways in which they found that work to be both challenging and meaningful.

At one table, Peter speaks first. Instead of his own work, he holds in his hands a quilt, a prop from Names and Faces, a play his drama teacher wrote about the AIDS quilt. Peter had performed in the play several times and found the experience powerful. Written specifically for the students, Names and Faces both reflected their interests and challenged them as actors. Peter describes how acting has given him a new awareness of the issue of AIDS—and how that has helped raise his acting to new heights.

Sharon describes an "inspirational essay" she had written after a unit on leaders and leadership. Assigned to write about a person who had changed her life, Sharon described her father's abandonment of the family and about her own relationship with her mother. The adults are visibly moved as she reads from her essay; its relevance to her is immediately apparent, but the academic rigor that went into the assignment only becomes clear after the visitors acknowledge Sharon to be a very good writer. She challenges that perception, explaining that the writing was hard. She pushed herself because it meant a lot to her, and she got good feedback from her peers and teachers. "It's the best writing I've ever done," Sharon tells her audience.

Sir Francis Drake High School is a medium-sized high school in San Anselmo, California, a suburb just north of San Francisco. Drake's student body of about 1,000 students is the most economically diverse of the three schools in the Tamalpais Union High School District. Located in the heart of Marin County, one of the most expensive communities in the United States, the Drake campus is nonetheless hardly prepossessing. Comprised of several low detached and semi-detached buildings set on 21 acres just blocks from the center of town, the school's exterior is constructed largely of cinder block and painted a nondescript yellow. A visitor first notices the main building across a large, roughly graded parking lot that separates the school from busy Sir Francis Drake Boulevard. The campus has its charms—two creeks traverse the property, which is pleasantly landscaped with trees, shrubs, and an ample lawn—but these features are only apparent on closer inspection. All in all, California's Proposition 13, a decades-old law restricting property taxes, appears to have placed stringent limitations on the district's ability to fund capital improvements at the school.

Prop 13 notwithstanding, one might suspect that suburban schools like Drake, particularly those situated amid affluence, would be relatively immune from the travails that plague their urban counterparts. As far as it goes, this assumption is largely correct. Suburban schools typically have access to more and higher quality resources. They find it easier to attract and retain talented teachers and administrators.

Students in suburban school systems routinely outperform urban students on standardized test scores—the most common measure of student achievement—and their rates of college acceptance, attendance, and graduation are higher.

As Coalition of Essential Schools founder Ted Sizer, among others, has noted, this success had led to a certain smugness in wealthier districts, a self-congratulatory willingness to accept the *status quo*. Governed by the adage "if it ain't broke, don't fix it," administrators, teachers, and parents are largely content to initiate change at the fringes of a school's organizational structures and pedagogies, leaving the traditional high school experience largely intact. In this case study, though, a particular set of circumstances propelled these stakeholders to reexamine the mission of a school, their beliefs about student learning, and the resulting school practices and structure.

The story that follows centers primarily on the influence of the Drake Integrated Studies Curricula (DISC) on a broader reform initiative at Drake High. Despite a rocky beginning, this innovative, student-centered, instructional program has come to assume a central place in the entire school's reform efforts, and DISC faculty have provided substantial leadership for school-wide change. While the DISC model has not become the school's sole instructional design—only about 30 percent of Drake students are enrolled in DISC academies—it embodies a way of thinking about and acting on issues of teaching and learning that provides a template against which many staff members and parents measure the school's unfolding reform initiative. Stand-alone school reform efforts within larger schools typically remain islands, isolated from and often resented by the staff and students within the larger school; Sir Francis Drake High School offers compelling evidence that such a result is hardly inevitable.

An Inauspicious Beginning

The inception of Drake's restructuring initiative dates back to the 1989–1990 school year, when the high school district targeted the campus to become the site for a new, integrated studies school-within-a-school. The Marin School for Integrated Studies (MSIS) would combine technology with cross-disciplinary, project-based instruction. The nascent program was bolstered by cash, in-kind, and technical support from the Autodesk Foundation, a newly created charitable spin-off from a local computer software developer. District officials hoped the plan would help turn around Drake, which had become the weakest of the district's three comprehensive high schools in terms of student achievement.

MSIS's beginning was inauspicious, to say the least; the program experienced its share of the logistical and program design difficulties associated with a start-up venture. For example, the MSIS model called for a 200-day school year, but it gave little consideration to those extra 20 days tacked onto the end of the school calendar. Consequently, the program encountered problems with student transportation to and from school, student lunch options, and holding classes in a building that custodial personnel were preparing for the fall semester.

Technology posed another problem. The Autodesk Foundation was poised to implement its vision of a technology-rich curriculum, but Drake was ill-prepared to handle the demands that computer technology would impose. Classrooms were not wired, technical assistance needs had not been considered, and, until the foundation went beyond its original agreement and provided the hardware, the program lacked computers.

Communications Academy

This program for eleventh and twelfth graders integrates social studies, English, advanced video productions, and advanced drama, and it allows students to use drama skills and cutting-edge digital video technology to produce quarterly public exhibitions of their learning. The following description was written for prospective students:

What is the Communications Academy?

The Communications Academy (ComAcad) at Sir Francis Drake High School provides an opportunity for motivated students to combine their academic and artistic interests in an integrated, project-based program. A rigorous curriculum in social studies and English provides the core content, which is explored thematically. Advanced-level arts instruction includes drama, digital video production, digital audio production, and web page design. These artistic and technological craft areas are used as "communications tools" for creating public presentations each quarter. In addition, students gain real-world skills through the operation of *Electric Stage Productions*, a school-based non-profit production company.

First and foremost, ComAcad is about learning. Students are expected to take responsibility for their own learning and seriously pursue a variety of personal and intellectual skills. ComAcad is also "process intensive." While quarterly exhibitions do shape the learning, the program features a learning cycle that puts great emphasis on studying, planning, performing, and evaluating.

Being part of the ComAcad learning community takes a special commitment. Since only three of the four periods are offered during the school day, students are expected to regularly spend time after school meeting with staff and students, rehearsing and editing performance pieces, and attending craft workshops.

—excerpted from ComAcad orientation materials

Of greater concern, resentment toward MSIS was beginning to build among the Drake faculty. Although school staff had voted to accept the district's somewhat aggressive invitation to situate MSIS within Drake, they saw the program—quite accurately—as separate from the school. All three faculty selected to teach within MSIS came from other district schools. Moreover, with a first-year enrollment of 30 sophomores, MSIS teachers carried considerably lighter student loads than did their Drake peers.

As MSIS entered its second year—adding 30 freshmen and 20 new sophomores to 20 returning juniors—tensions around issues of resource equity became palpable between MSIS and other Drake staff. Even though two of three new MSIS teachers were drawn from Drake faculty, media attention to the program, perceived favoritism from school and district administrators, and MSIS's receipt of a $705,000, three-year, "Next Century School" grant from RJR/Nabisco bred considerable resentment. The conclusion of MSIS's second year presented a stark dichotomy: as an innovative, well-funded model for instructional reform, MSIS was garnering acclaim. At the same time, the reform was still more vision than substance, and program staffing was in considerable disarray. Five of the six MSIS teachers resigned, transferred, or did not have their contracts renewed; Drake's principal, caught up in the winds of district and school change, tendered her resignation.

Building Credibility

The only staff member to stay for MSIS's third year was Michelle Swanson, a highly regarded theatre arts teacher who had worked in both of the district's other comprehensive high schools and joined MSIS for its second year. Encouraged by district and Autodesk Foundation personnel to redesign MSIS, Swanson began to consider ways to use her performing arts expertise as a foundation for revamping the program. For Swanson, collaboration and performance before a real audience were theatrical elements that engaged students and brought out their best. She suspected that the program would have at its disposal a powerful tool to foster student learning if these same components could be brought to the school experiences of MSIS students.

At the same time, Swanson had to tread softly with her colleagues. Painfully aware of how the Drake community perceived the program, she began recruiting Drake teachers to join with her in revamping MSIS.

The first change signaled MSIS's absorption into the overall school framework. Renamed the Drake Integrated Studies Curricula (DISC), the erstwhile MSIS launched three new integrated programs: the Revolution of Core Knowledge—ROCK—for ninth and tenth graders, and the Communications Academy and the Survey of Engineering for eleventh and twelfth graders. A new program staff, comprised of Swanson, two other Drake faculty (including a highly respected senior member who leant credibility to the program), and a pair of technical teachers hired from outside the district, began to breathe life into the integrated curricula.

The three new programs launched under the DISC banner during the 1991–92 school year differed in their originating impulse. The design of the Communications Academy—which was soon called ComAcad—was heavily influenced by Swanson's experience engaging students in drama productions and by the knowledge of videographic technologies brought by teacher Steve Kuever. ROCK emerged out of an understanding among DISC staff that an integrated, contextual approach to instruction would flounder in the upper grades if a foundation for that approach were not simultaneously built with incoming students. Like Kuever, Mary Kitchens had worked with Swanson's project-based theatre arts curriculum; thus, she could articulate the DISC vision for new team members and students alike and became instrumental in fashioning the ROCK curriculum.

Survey of Engineering

Designed for eleventh and twelfth graders, the academy integrates physics, sculpture, and an engineering projects class. The program introduces students to different areas of engineering and computer-aided design and requires them to apply academic concepts from physics and mathematics to solve real-world engineering problems. The following is excerpted from a description written for incoming students.

Welcome to the Survey of Engineering Academy.

This program represents a new approach to education. SOE transcends traditional education by bridging the gap between educational curricula and practical application with an eye on preparing students for post-high school opportunities. The philosophy of the program is to foster a student's innate desire to build and to empower each with the skills of craftsmanship, communication, and scientific insight.

—excerpted from Survey of Engineering orientation materials

Revolution of Core Knowledge

Designed as a two-year program for ninth and tenth graders, ROCK integrates science, English, history, social issues, art, and technology. Characterized by rigorous academic requirements and a project-based approach to instruction, the curriculum offers students the opportunity to improve time management and higher-order thinking skills while developing the kinds of interpersonal competencies needed in the workplace. The following is from an introduction written for incoming students.

Welcome to ROCK.

The Revolution of Core Knowledge Program represents a different approach to high school education. ROCK focuses on both knowledge and skills. We leave the busy work out. We want to turn out students who can engage the world and make changes. To achieve that goal we restructured the way we deliver your education. Then we crafted a series of challenging, real world projects designed to sharpen your skill levels. And thirdly, we designed our program to make you responsible for your own success.

In order to keep you, the learner, at the center of our efforts, we restructured the way we deliver your education. ROCK students are team taught by four teachers. This allows us to keep better track of your progress and difficulties. We are able to tailor our teaching efforts to meet your specific needs. ROCK teachers meet for four hours each week to discuss student progress. We have control of the morning schedule so we can better meet your instructional goals. Working together, we improve the quality of your education.

At the center of the ROCK program are a series of projects that students work on in teams. Projects are designed to teach you the skills that will serve you after your high school days are over. You will learn how to gather and sort information, to think critically, to speak publicly, to organize people and events, to write effectively, to communicate visually and dramatically. You will learn to take risks, to test new ideas, to overcome your fears. You will never have worked harder in your school life—and you will have fun doing it.

The third important aspect of ROCK is your development as an active participant in your own education. You will have new responsibilities that previously your teachers handled for you. You will have to negotiate your work schedule, choose how to divide up tasks in a project, decide when to meet with other students. You will even make decisions about the grades you receive. Your ROCK teachers will be there to give you successful strategies and structures for all these decisions and responsibilities.

ROCK is designed with your success as our goal.

—excerpted from ROCK orientation materials

The impetus behind Survey of Engineering was more problematic. Responding to Autodesk Foundation interest, DISC staff and the school district supported its inclusion even though the teacher who had designed the program had departed and no faculty members were expressing enthusiasm for it. Not wishing to alienate their major sponsor, DISC went ahead and launched an engineering program that included physics, electronics, and drafting, but not math. No math teacher at the school was willing to be part of the engineering curriculum.

The three new DISC academies shared a common design. Students enrolled in a two-year sequence of academy courses for half the day and took the balance of their course schedule outside their respective academies. ComAcad students, for example, would be enrolled during one year in academy classes in government and economics, humanities and twentieth-century literature, advanced drama, and advanced video production, while taking science, foreign language, physical education, and other classes outside the academy. The following year, their drama and video production courses would be augmented within the academy by offerings in U.S. history and American literature and essay writing. Because students from two different grades took classes together, the sequencing of academy courses alternated by year for incoming students.

DISC's genesis also benefited from the appointment of a new principal at Drake. Bill Purcell had been a Spanish teacher for much of his career in the district and most recently had been assistant principal at another district high school. Drake High, Purcell's *alma mater*, would be his first principalship. A strong supporter of project-based approaches to instruction, he was immediately drawn to the ideas represented by DISC. At the same time, though, he recognized the dangers that a fractured faculty posed to his stewardship at Drake, and he counseled Swanson, in her words, to "lay low for the first year" while he sized up the situation.

Lessons from the Performing Arts

For the DISC team, laying low did not mean remaining disconnected from the rest of Drake faculty. Aware by this time of not only the tensions engendered by MSIS but also some of the reasons for those tensions, the team agreed early on that DISC had to be a Drake program in more than name. The MSIS model, which limited teachers' course responsibilities to program classes, was discarded. Instead, all six DISC teachers situated themselves within Drake's academic departments and took on teaching responsibilities outside the integrated curriculum program. Structurally, two faculties became one. In addition, DISC staff began engaging in conversations with their faculty peers around the sources of discord and possible solutions.

This low-profile approach to launching DISC began to pay dividends in terms of building collegiality. At the same time, the six DISC faculty members clarified the shape that integrated studies should take at Drake. They understood that the strength of the model they were developing lay in its ability to ensure close, meaningful relationships with students. This would allow faculty to design academic challenges built on students' individual strengths while shoring up their weaker areas. It would also foster a climate that encourages students to take academic risks. Taking a cue from Swanson, the team agreed that student project work would culminate in public exhibitions: student performance to demonstrate competency.

Public demonstrations of mastery, however, demanded that DISC faculty be clear about what they wanted students to know and be able to do. Where the typical high school curriculum favored breadth over depth, the team decided to ask students to delve deeply into relatively few content areas. Actually, the project-based focus of the curricula being devised for ROCK, ComAcad, and Engineering necessitated a richer exploration of fewer topics. Surface familiarity with that knowledge would not suffice if students were truly to come to new understandings and to present their learning in a public way.

The idea of using knowledge itself had implications for what students would be expected to know and do. The very idea of interdisciplinary curricula anticipated that

students would explore questions that were authentic—that is, personally meaningful—from a variety of perspectives. To do so effectively, students would have to be adept at accessing, comprehending, critiquing, contrasting, and, ultimately, synthesizing data into a coherent whole that they could express in exhibition.

The approach the DISC team began to implement was, of course, a rather startling departure from traditional high school education. The question was whether it would result in higher levels of academic achievement.

Student exhibitions became an important early venue for addressing that question, one that presented the added benefit of shifting faculty discussion of DISC away from the conflicts born of the MSIS years to issues of teaching and learning. By DISC's second year, 1992–93, teachers who attended exhibitions were beginning to acknowledge that students in the integrated programs were demonstrating a high level of learning.

Recognizing an opportunity to broaden the faculty's understanding of the power of their project-based approach to teaching and learning, DISC staff got permission from Purcell for ComAcad students to present to faculty their video products from a recent American history project. The student videos, part of a unit entitled "Social Revolutions in America," in Purcell's words, "blew the faculty away." Not only were the videos technically proficient, but they revealed the depth of student understanding of the subject matter.

When Purcell opened the floor to questions, the students passionately discussed their work. Through regular exhibitions, they had become practiced in articulating what they had learned, and Drake teachers saw exceptionally high levels of student engagement, well-reasoned, research-based treatments of the topic, and creative, coherent communication of ideas. The ComAcad students' performance effectively countered questions about the academic rigor of the DISC approach.

This did *not* mean that every—or even most—Drake teachers were interested in teaching within an integrated program. In fact, many of them were apprehensive that the school was moving toward establishing a school-wide, integrated instructional approach. This longstanding concern—another remnant of the favored position MSIS had been seen to occupy—was mitigated by the DISC staff, who were committed to their belief that their program should enjoy no privileged status, and by Purcell, who was careful to position himself as principal of the entire faculty. He proved adept at maintaining a focus on student learning that allowed for multiple means to the same ends.

A Plan to Improve Teaching and Learning

The 1992–93 school year ended with day of brainstorming and planning by Drake high students, teachers, and parents. The goal was to launch a school-wide, three-year plan for instructional improvement. Part of a larger, district-funded strategy to improve the schools, the planning process provided the Drake staff with the opportunity to begin addressing issues of particular import to the school community. The "Drake Plan" that emerged from the brainstorming session identified 12 specific areas for reform, including technology, daily schedule, higher standards, curriculum, and life skills.

The new school year opened with a high level of participation in the change process: all faculty and non-teaching personnel—and more than a few students and parents—agreed to serve on one of twelve committees corresponding to the identified

areas for reform. Purcell charged each committee with framing a specific need related to improved student learning, defining a realizable objective to meet that need, and constructing an action plan and budget for accomplishing the objective.

These committees brought veteran faculty together with a not inconsiderable number of newer staff. The unusual infusion of new faculty members came about as the result of staff turnover during Purcell's first years at Drake—some prompted by the changes and frictions over the new direction and some by an unusually high number of retirements. Only two years into his tenure, more than a quarter of Purcell's staff had known no other principal at Drake.

In Purcell's view, the three-year improvement process was instrumental to Drake's reform initiative, less because of the changes themselves than because of the momentum, sense of empowerment, and sense of community the process engendered. According to Purcell:

> *The improvement plan covered most areas of the school. Committees developed action plans that were doable and measurable, and we accomplished the three-year plan in a year-and-a-half. What made it work was that staff had a choice of what to work on; they were given the time to work on it. And because the objectives were concrete and realizable, the opportunities for success were high. There was a sense of pride and accomplishment when we were done.*

A number of innovations resulted from the first Drake Plan, including the establishment of both a school-wide student advisory structure and the Drake Leadership Council, a new school governance body. Of particular import was the work of the Daily Schedule Committee. Anchored by three teachers held in high regard by their colleagues, it explored ways to better organize students' and teachers' days to promote student learning. Committee members studied schedules, visited other schools outside the district, and spoke to students.

The committee's efforts benefited from a February 1994 *Education Week* article in which Coalition for Essential Schools founder Ted Sizer challenged administrators and teachers from affluent suburban schools to reexamine the efficacy of their academic programs. Sizer suggested that educators spend time shadowing students in their systems for a day, and predicted that many would encounter "intellectual chaos, with students drifting through a series of uncoordinated classes with widely divergent standards." Swanson picked up on Sizer's challenge and, with Purcell's support, brought it to the faculty for consideration. "What would we find," Purcell inquired, "if we were to shadow our students for a day?"

Although the idea created anxiety among the faculty—many teachers were concerned that the "experiment" was a prelude to a critique of their teaching—their willingness to assent suggests how far teachers had come in trusting one another. Several respected veteran teachers volunteered each to shadow a student from the start of school through one entire day, attending classes and extracurricular activities. At the end of the day, the teachers spent two hours processing their experience with one another, in preparation for the following week's faculty meeting, at which they reported on the amount of learning they had seen taking place.

The message carried back to the Drake faculty confirmed Sizer's prediction. To the question "How much learning takes place in a day at Drake?" the shadowing teachers responded with a surprising "Not much." Like their peers, they had assumed that the students' educational experiences were at least reasonably coherent and challenging.

Instead, they witnessed a day that was disjointed and frequently disrupted, and learning that often seemed superficial. Moving through the seven-period school day, the teachers returned to the faculty at large with a new appreciation for the way in which discreetly defined disciplines and the 50-minute period seemed to constrict students' academic lives.

Yet there were times when students truly appeared engaged in learning. These times, the shadowing teachers noted, tended not to occur in the core disciplines but rather in subjects usually considered peripheral, in the academies and in extracurricular activities. What all these learning environments—the arts, speech, yearbook, music, video production, debate, athletics—had in common was an emphasis on performance and well-defined criteria for excellence.

Intrigued and challenged, the shadowing experiment marked the beginning of a shift in thinking. With time, the question "how much learning takes place at Drake?" led to a pair of questions: "What kind of learning do we want students to display?" and "How do we bring that learning about?"

According to Swanson, that discussion grew organically:

> *We talked about the difference between content and skills, then began to discuss how to grow students as thinkers, and that led us to describe the kind of behaviors—habits of mind—we wanted students to demonstrate. We continued to refine the role exhibitions played in demonstrations of understanding.*

Student Voices

Rather than just your teacher judging you or just a few classmates seeing your project and talking to you about it, you've got to worry about three or four hundred people seeing your work. And if you don't know the subject, you're going to make a fool of yourself out there. You're going to have people sitting out there in the audience saying "Hey look! He doesn't know what he's talking about."

You have to know it, and you have to know it solid. And you have to be able to show *how* you knew it effectively, without any confusion—you can't make mistakes. It's all got to be researched over and over again to make sure it's correct.

—Justin, ComAcad student

This evolution in the faculty's beliefs about what students could do—and a growing appreciation for the conditions under which high-quality learning emerged—were put to the test in a vote of the faculty on a new schedule. When the scheduling committee proposed a block schedule that included twice-weekly periods for student advisement and club activities, the measure passed by an overwhelming majority. Issues of teaching and learning had moved to center stage at Drake.

How Do We Know It's Working?

As Drake staff implemented a more integrated curriculum, the academy model, and block scheduling, reformers within the school felt a growing need for better ways of assessing the changes. Was more learning taking place? Was it the kind of learning the staff was hoping to promote? DISC faculty pointed to student exhibitions as proof that both questions could be answered in the affirmative, at least in the integrated programs.

Academy X

This program for eleventh and twelfth graders prepares students for leadership in community, business, and government organizations. Students take a core curriculum of social studies, English, and advanced leadership classes and also complete internships at local businesses and public institutions. The following introduction was written for incoming students.

Welcome to Academy X

Look around you. You will notice that the room feels more like an office than a classroom. That's by design. Think of yourself as a student who is learning skills and information useful to your future as an employee, entrepreneur, and contributor to a healthy society and positive world.

How will you accomplish this? First, you will be involved in projects that integrate the skills and knowledge you need to be successful in school or at work. Second, you will spend 10 weeks in an off-campus internship learning experience—an "on the job" experience that will show what successful adults do all day long. Third, you will be challenged. One student last year said, "Academy X isn't hard, but it's really challenging!" She meant that you won't be assigned a ton of busywork or asked to memorize a list of dates in US History. But be prepared to work independently, to take total responsibility for your learning, and to stretch yourself as a learner. You will receive credit for three classes, although you will not know at all times which class you are in.

WHAT WILL I LEARN? This year you will learn about the literature and history of the United States, focused primarily on the 20th century. You will complete two major and two smaller projects. All of them integrate academic knowledge, real-world skills, and art or music. You will be expected to fully participate in the projects, read independently, take notes, do homework, practice good writing and oral presentation skills, and be responsible for your individual accomplishments and the success of your project team.

—excerpted from Academy X orientation materials

Yet as powerful as performance-based assessments of student learning might be, they did not eliminate the need for traditional measures of student competency. Not quite trusting what was literally exhibited before them, parents and staff members alike wanted to know: did the performance data indicate that students were learning more, or was this simply an illusion? Were grade point averages rising? Were students performing better on Scholastic Assessment Tests (SATs) and California's Golden State Examinations? Were more students taking and passing advanced-placement exams? Perhaps most important, was the school improving on these measures relative to the other district high schools?

Student Voices

Academy X has prepared me for after high school. Public speaking skills, budgeting time. Already I've applied them outside of school to my internship. I look forward to using these skills outside of school. I would never have expected to do a résumé in high school.

—Jessica, Academy X student

For answers to these questions, the school looked to the district office, where Dr. Chris Anderson, the assistant superintendent for instruction, had been promoting a data-based, student-outcome-driven approach to high school reform. Many Drake teachers were familiar with Anderson's work. Several had been involved with district-wide, subject-specific, research study groups that had investigated whether particular course offerings produced intended learning outcomes. Those teachers knew from

Student Voices

It's rewarding to spend eight to ten weeks putting together a project. You get to pull it together in a final project. And it's cool to get that feedback.

—Sean, Academy X student

experience that Anderson would not allow data to be used as a weapon against teachers and that the district would try to direct funds where the data signaled a need for better performance. For example, Anderson's regular use of surveys to gauge the attitudes of staff, parents, and students also helped to create an atmosphere where data could be a useful tool in Drake's reform initiative. Many teachers had been quite impressed when the district quickly followed a survey on impediments to teaching with action to address the most commonly mentioned obstacles.

Studies of the Environment Academy

The Studies of the Environment Academy integrates environmental science, chemistry, second-year algebra, probability/statistics, economics, government, and internships. Students in grades eleven and twelve study complex environmental problems through extensive projects involving field studies, laboratory experiments, mentorships, and research-level technology. The following description was written for incoming students:

This upper division academy is designed to demonstrate academic achievement in each of the courses offered, as well as develop many skills by extensive field work and hands-on laboratory experiences. The academy is to be a student-centered, activity-based, issues-oriented curriculum that encourages small-group learning.

Most of the complex and perplexing issues and problems facing our nation involve more than scientific concepts or economic principles. They also involve individual and social values and group decision-making processes. Accordingly, SEA-DISC aims to prepare students for informed, effective citizenship through stimulating and engaging projects with mentors, discussion and debate on crucial environmental problems, and a variety of student "decision-making" activities.

Using data collected and compiled by Anderson, Drake staff and parents began to examine the school's progress in promoting student learning. In keeping with the goal of using data to guide reform, not to single out failure, Purcell compiled a "Drake Data" report that looked at measures by year, beginning with the 1992–93 school year, his second at Drake (*see Appendix, page 122 for the 1998 Drake Data report*). In so doing, he underscored his intention that the information be used

to judge the school's progress *during* his tenure, not in comparison with that achieved under his predecessors.

Early data included both promising signs and reasons for concern. From 1992–93 to 1994–95, grade point averages had steadily risen for all grades but the eleventh; the number of students with GPAs above 3.0 had risen from 39 percent of all students to 55 percent; and Golden State Examination results showed improvements both in numbers of students taking the various subject tests and the number of students performing well on them. On the other hand, average Scholastic Assessment Test Scores remained flat, and SAT Achievement Test scores in English composition and twelfth-grade writing suggested a downward trend. The findings pertaining to writing were especially troublesome in light of a 1991 districtwide decision to focus attention on student literacy, but they provided staff with a clear indicator of the work that lay ahead.

Broadening the Leadership Base

Purcell had been committed to the pedagogical concepts underlying the integrated studies program from the time he assumed the principalship, but throughout his first three years he continued to maintain that the approach should not be forced on teachers: if DISC succeeded, it would expand organically. This is what indeed occurred as new teachers joined the faculty and the faculty as a whole grew more conversant with the integrated approach. Impressed by the DISC models, several faculty members began developing plans for new offerings. The 1994–95 school year saw the integration of U.S. history and American literature as a junior-year requirement for all students. In 1995–96, the Studies of the Environment Academy (SEA-DISC) began, and the following year the school launched Academy X, built around the themes of leadership and public service.

Student Voices

I might be disappointed with the technology and theatre programs at other places, colleges, because it won't be like ComAcad—learning to work in a group and take initiative. And the academic things that we do—if you don't take time to learn things, like economics for example, you feel stupid. You're showing a lack of knowledge to more people than just your teacher.

—Amelia, ComAcad student

Speaking: you have to do it all the time. You have to explain projects to your audience. Normally you don't get a chance to do those things in high school. We have to answer questions and sound intelligent. So you learn really fast. We're always researching in this academy, so we're always reading.

—Julia, ComAcad student

In many respects, the 1996–97 school year marked a turning point in Drake's reform efforts. The school had completed its first three-year plan, implemented block scheduling, and launched two new academies to complement the original three DISC offerings. Many new faculty members had joined the school staff, and the divisiveness that had characterized the MSIS years had given way to a sense of accomplishment and momentum. Most important, the staff had become much more adept at focusing attention on one overriding objective: enhancing student learning.

To this point, the reform effort had been driven mostly by the principal and a few DISC staff. While others certainly had played important roles in the change efforts over the first five years, and the creation of the Drake Leadership Council as a school governance body had provided greater opportunities for staff, parent, and student involvement, the vision still tended to reside with a fairly small number of people, and the approach to reform was largely opportunistic. In Swanson's words, "We were doing it by the seat of our pants." By the 1996-97 school year, it was becoming increasingly obvious that the more intractable problems the school continued to face—the academic and social difficulties encountered by first year students and students' struggles to meet the district's literacy expectations, among others—could not be addressed without a broadened leadership base and a more systematic approach.

An especially promising prospect for accomplishing these goals appeared in the form of the Bay Area School Reform Collaborative (BASRC), a loose coalition of school districts created in 1995 as the recipient organization for a $25 million grant from the Annenberg Challenge (*see box*).

Overriding Goals of the Annenberg Challenge

- To promote, in some of the nation's most urban and rural areas, an unprecedented number of public schools, which in collaboration with their immediate community arrange their resources so that each child is known well; set uncompromisingly high academic expectations for all children; assess the progress of each student by means of a careful and continuing review of that child's actual work; and exhibit daily the ideals of acting as a democratic and thoughtful learning community.
- To unite these changing schools in a diverse array of small systems of schools and thereby encourage member schools to learn from and support one another. To provoke the larger, formal systems—local, county, and state—of which these smaller systems are a part to provide participating schools with the autonomy, flexibility, resources, and time they need to become genuinely good schools (i.e., to fulfill the principles listed under the first goal above).
- To mobilize the local community supports necessary to sustain these individual schools and the networks of which they are a part; help the best ideas and practices emerging from these schools—and the partnerships they forge—to spread; deepen the public resolve to demand and invest in public schools where all children are known well and use their minds well.

—adapted from the Annenberg Challenge Web site: www.aisr.brown.edu/challenge/program_info.html#goals

Reflecting the Annenberg mandate, BASRC reform criteria required that participating schools focus on whole school reform guided by best practices in teaching and learning, high standards for students and adults alike, systematic management of the change process, partnerships with community entities and institutions, and the establishment of a learning culture at all levels. These expectations corresponded well with the direction in which Drake was moving; BASRC's insistence upon a systems approach to change was particularly appropriate to the challenges Drake faced.

However, a systems approach would require a broadening of the leadership base at Drake. Although still playing a key strategic role, Swanson was by this time much in demand nationally as a consultant in professional development, and she was only

working at the school part-time. It was clearly an opportune moment for other staff members to emerge at the forefront of the school's change efforts. Those assuming primary roles included several younger teachers who had helped to build the integrated studies curricula: Bob Lenz, Theron Cosgrave, Paul Grifo, and Thom Markham had all been instrumental in the growth of DISC and were eager to help expand the reform work schoolwide.

A More Systematic Approach to Change

When Drake won a four-year $475,000 BASRC grant in the spring of 1997, the school had already begun to reap important dividends simply from the process of applying to become a BASRC leadership school. In developing the application, Drake staff mapped in great detail a vision for the school as a learning community, the most pressing or otherwise significant roadblocks to realization of that vision, and the plan envisioned for surmounting those roadblocks. As a result, the application gave rise to a new Drake Plan encapsulating the school's strategy for subsequent reform.

The plan was written in spring 1997 as a collaborative process involving staff, parents, and students. It identified engagement as the primary value toward which all efforts would be directed. In retrospect, however, staff tended to view the choice of engagement as a misstep—Purcell labeled it naïve—because it could not easily be measured and it relegated learning outcomes to secondary importance. Nonetheless, the plan served as a springboard for a more coherent, *systematic* approach to change. As Academy X co-director Bob Lenz explains:

> *Before BASRC, data and evidence were not well-used words around Drake. Evidence was definitely not used by staff to make decisions. The biggest change that has occurred since BASRC is that our reform work is very intentional. We plan with the end in mind, and we think at least two to three years out.*

The plan identified a number of gaps between where the Drake community wanted the school to be and what it termed "current reality." Freshmen appeared to be having difficulty acclimating to the school, both academically and socially; the school needed to make more progress toward internally consistent instructional practices and standards; the school had not yet begun preparing to integrate new district-mandated graduation outcomes.

The Drake Plan outlined a wide array of activities to address these and other gaps. Recognizing that the most acute challenges centered on the ninth grade and that the comprehensive change efforts envisioned had to be broken into manageable pieces, the four-year plan specified beginning the effort with that grade, progressing sequentially through the other three grades in successive years. The school would use BASRC funding to support teams of teachers (or teams of teachers, parents, and students) in implementing and measuring the effect of the proposed activities. The school also earmarked funds to create new staff leadership positions for staff who would manage community partnerships and promote and expedite the plan's research agenda.

If the original Drake Plan was naïve, it was also ambitious. Teams were to implement and systematically examine the effectiveness of three freshman interventions: a reading and writing laboratory, a "Freshman Connections" outreach program, and an alternative instructional delivery pilot. Other teams would explore alternative assessment possibilities. A new staff development and organizational change "visioning group"—the Forum—would improve communication and facilitate access to the school's decision-making process.

Leadership Opportunities at Drake High, 1998–99

Drake Plan Team. Membership includes three administrators, four release period leaders, four stipended leaders, two parents, and two students. The Forum is responsible for providing vision for the Drake Plan.

Leadership Council. The DLC is comprised of three administrators, nine department chairs, the four Drake Plan leaders, two members of the classified staff, the librarian, two parents, and five student representatives with the principal serving as chair. It is the final decision-making body on all Drake Plan initiatives, in addition to other school-wide decisions and is also empowered to send proposals to the whole staff for consideration and/or vote.

Additional Leadership. Staff wishing to accept a smaller leadership role can apply for a small stipended position to support their time.

—adapted from the Drake Plan

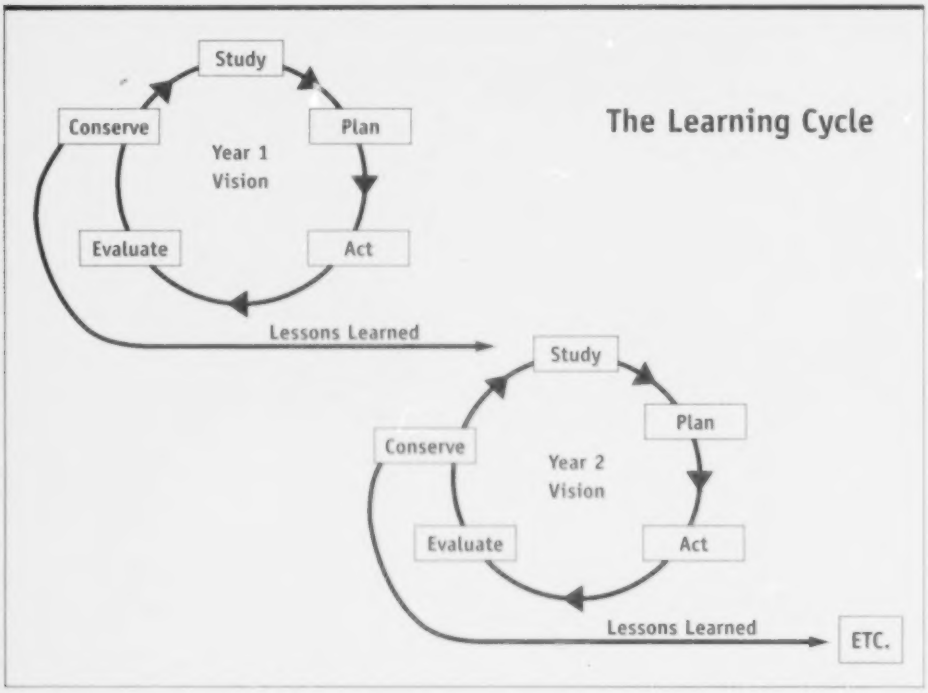
Reflecting on Year 1 of the Drake Plan two years later, staff acknowledged that implementation was anything but smooth. A spring 1999 progress report on the reform effort admitted as much: "Overall, Year 1 was characterized by a series of false starts; movement toward meeting the goals of the Drake Plan was fitful and far from the intended comprehensive reforms."

Nevertheless, progress took place on several fronts. BASRC funding allowed Drake to establish the Forum. Comprised of 20 teachers, parents, and students, including four teachers with reduced teaching responsibilities, two others who receive stipends, and two stipended parents, it served as a vehicle for expanding leadership at the school. In addition, staff gained valuable practice in using a heuristic tool called "The Learning Cycle" (*see next page*) that Swanson had introduced to ComAcad teachers. The Learning Cycle, which was virtually identical to BASRC's "Cycle of Inquiry," gave staff an effective framework for thinking about change processes and grounding efforts in planning, action, and evaluation.

Of perhaps greater importance were two decisions reached by faculty regarding the direction of the reform effort. Ongoing discussions among staff identified four elements critical to the school's success: more personalized learning, instructional design that engages student learning, a broad range of academic and emotional support systems for students, and a school culture that encourages a common vision for the future.

These elements were not easily arrived at. Some staff were concerned that the elements—Purcell referred to them as the four pillars of Drake reform—actually diverted attention from teaching and learning. Other teachers were concerned that they lacked definition and were thus open to a range of interpretations. Nonetheless, the act of agreeing as an entire staff to adopt the elements brought greater clarity to Drake's efforts and provided a structure upon which to build a systemic approach.

Staff also decided to align Drake's outcomes focus with that promoted by the Tamalpais District. This shift from student "engagement" as the key measure of successful reform to adoption of the district's "Fourteen Outcomes" helped maintain a focus on academic achievement, not to mention the district's expectations: all district high school students scheduled to graduate by 2002 or later would be required to achieve the reading, writing, speaking, and math competencies encapsulated in three of the outcomes.



If We Build It, They Will Learn: Implementing the Drake Plan

If the 1997–98 school year can be characterized by the challenge of developing a systematic, data-driven approach to school-wide transformation, implementation was the keyword for 1998–99. The Forum and other staff met in August 1998 to revise the Drake Plan, then presented to staff a much clearer roadmap for reform.

Reflecting a belief that issues of teaching and learning were of paramount importance and that changes to enhance them needed to be grounded in evidence of efficacy, the 1998–99 Drake Plan called for all staff to be engaged in "action research" as participants in Teaching and Learning Teams (*see box on next page*). Offered the choice of eight topics, teachers—individually, in subgroups, or as an entire team—designed, implemented, and measured the effectiveness of a classroom-based intervention that addressed student engagement and, in turn, achievement.

The revised Drake Plan also set out a number of initiatives to build systems and structures supporting the four critical elements, chief among them being a "cluster" model for ninth- and tenth-grade instruction. Given the success of ROCK, staff leaders envisioned that program as the model for the cluster approach.

The intention of the leadership group was to ensure that Drake's change efforts remained focused on the classroom—the point of direct contact with students. This strategy paid off. When polled in late April, 90 percent of staff members agreed that the research direction of the Teaching and Learning Teams was a positive experience. Most staff members turned in written reports outlining their research. Late that spring, the school devoted an afternoon to exhibitions of team and individual classroom research work.

Action Research in Teaching and Learning Teams

Drake teachers engaged in action research projects to design, implement, and measure the effectiveness of ways to engage students and improve their achievement. For example:

- A team of ten staff members explored whether they could improve student performance on the district's math problem-solving communication task by engaging them in similar tasks in the classroom, and by using the Learning Cycle as a process for examining student outcomes.
- A teacher investigated two related questions: to what degree do Socratic seminars promote better listening skills; and could students gain greater understanding of Art Costa's "intelligent behaviors" by using them to analyze literature?
- Two teachers collaborated to examine whether it was possible to increase students' effectiveness in, and decrease their anxiety about, working with others by training them in group work skills.
- A team of nine investigated whether teaching discrete writing skills across disciplines using a uniform writing curriculum would improve student writing.
- A teacher working alone explored the effect of personalization on a Spanish unit that students complained was dry and flat.

Viewing the BASRC initiative at the end of its second year, most staff were satisfied with the direction of reform. The data once again showed improvement (*see Appendix, page 122 for the 1998 Drake Data report*), allowing staff to begin 1998-99 with a sense of confidence that the approach to school change was on the right track. An increasing number of staff members were assuming leadership roles, the school was refining the processes for making group decisions, and most important, the Drake community was getting better at identifying and addressing fundamental issues of teaching and learning.

Staying the Course: Drake Looks Ahead

As the Drake community looks forward, challenges remain. In September 1998, Purcell announced that the school year—his eighth at Drake—would be his last. Purcell's leadership had been of no small import in moving Drake from a place with a divided staff and poorly performing students to one that was recognized that fall as a California Distinguished School. With so many other staff taking on key functions in the change effort, Purcell felt that his role had become less crucial, even if others tended to take a slightly different view. Teachers do acknowledge that the leadership capacity at Drake has indeed grown—so much so that staff appeared confident that reform work would weather Purcell's leaving without difficulty. Yet, the same staff feel that his leadership approach engendered trust that created a "zone of safety" in which creativity and experimentation could flourish. How Purcell's leaving might affect this intangible piece of the reform puzzle remains unclear.

The integrated studies approach continues to color Drake's reforms. Concern for the academic difficulties encountered by younger students has led the school to personalize their instruction by clustering freshman and sophomores, beginning with 1999's incoming ninth graders. Students in these smaller learning communities share the same three classes and the same teachers during each of their first two years of high school. In-depth faculty collaboration to improve practice—another DISC hallmark—has become more common, as faculty with increasing frequency create informal teaching teams, form action research groups for teaching and learning, and use department meetings to focus on student outcomes. At the same time, students and staff alike continue to see value in Drake's distinction as a "school with options." The near-term likelihood that all students will be enrolled in integrated academies, or that all teachers will teach in teams, seems remote.

Of course, this raises fundamental questions regarding the direction of reform. The integrated studies approach to instruction is characterized by rigorous, relevant, highly personalized, *integrated* learning that uses the community as classroom, and Drake's reform efforts are largely predicated on the assumption that it is precisely these features that engage students and produce higher levels of achievement. In what ways is the high school experience qualitatively different for students not enrolled in an integrated studies program? What mechanisms will best encourage and support these features in stand-alone course offerings? How might the school encourage less formal opportunities for integration? Will the benefits of the integrated studies approach accrue to the same degree in those classes that lack a formalized structure? These and other related questions face the school's reform leadership.

These issues are not inconsiderable, yet the Drake community has displayed a promising capacity to find answers that reinvigorate the change agenda. Reform began as an organic *community* process at Drake, and it remains so, notwithstanding the more structured and systematic nature of efforts under the BASRC umbrella. Having rejected the *status quo* of high school education and begun a process of reform with student learning at its center, the Drake staff has discovered that *maintaining* the reform impulse requires broad-based involvement and commitment. As room continues to be made for more voices, the vision for change continues to grow and shift, reflecting those voices. In the words of Academy X co-director Bob Lenz, "[Purcell] empowered the staff to find its own vision, become leaders, and make it happen."

As the 1998-99 school year wound down, the staff selected 13 respected individuals, many of them new to leadership roles at Drake, to move the Drake Plan during the coming year. Plans were being made for a summer leadership retreat. Drake's new principal, Carol Eber, met with staff and reassured them that she understood and respected both the reform trajectory and the shared leadership model at the school. Staff enthusiasm remained high. ROCK co-director Paul Grifo captured the prevailing mood best: "I am looking forward to next year with unbridled enthusiasm."

Appendix: Drake Data 1998

Cumulative Average Total GPA by Class				
Year	9th	10th	11th	12th
1992–93	2.59	2.72	2.81	2.74
1993–94	2.77	2.69	2.80	2.91
1994–95	2.91	2.87	2.77	2.90
1995–96	2.73	3.00	2.97	2.92
1996–97	2.97	2.84	3.08	3.05
1997–98	2.82	2.98	2.97	3.13

Students with Cumulative Total GPA below 2.00		Number of Students on Honor Roll (3.0 and above)	
Fall 1993	112 (15%)	1992–93	272 (39%)
Spring 1994	130 (19%)	1993–94	293 (44%)
Spring 1995	134 (19%)	1994–95	389 (55%)
Spring 1996	113 (15%)	1995–96	392 (52%)
Spring 1997	74 (9%)	1996–97	434 (56%)
Spring 1998	76 (9%)	1997–98	453 (54%)

Mean SAT Scores		
Year	Verbal	Math
1991–92	450	530
1992–93	440	510
1993–94	452	504
1994–95	452	530
1995–96	534*	537*
1996–97	538*	536*
1997–98	560*	551*
*Re-centered 1996		

Advanced Placement Exams: Number Taking Exams/Number Passed (Score of 3, 4, 5)						
	92–93	93–94	94–95	95–96	96–97	97–98
Calculus AB	8/8	10/8	7/7	15/10	11/8	15/12
Calculus BC				1/1	1/1	
English Lit/C	13/12	17/14	18/14	17/11	26/20	21/21
French Lang	5/3	4/3	None	2/1	4/2	6/5
Spanish Lang	3/2	4/2	6/6	6/3	8/8	15/13
U.S. History	19/10	20/10	8/4	20/17	22/19	23/16
Art/General			1/1		4/3	4/2
Art History					1/0	
Computer Science AB				1/1		
Gov't./Politics				1/1		
Chemistry					1/1	
Biology						11/10
Environmental Science						4/2
Physics C - E&M						1/1

Mean SAT II Scores/Number Taking Achievement Tests							
	91–92	92–93	93–94	94–95	95–96	96–97	97–98
Eng Comp	532/42	515/37	502/50	495/42	536/60	544/66	560/81
Eng Lit	510/8	549/7	485/15	533/11	545/25	562/21	573/29
Math I	546/38	530/32	502/43	529/35	539/9	—/3	569/7
Math IC					531/41	533/52	543/69
Math IIC	632/9/	626/9	574/8	632/10	617/10	614/15	605/17
Amer Hist	521/30	461/16	500/24	501/21	513/24	549/34	575/40
World Hist						—/1	—/2
Chemistry	550/4	600/6	556/7	608/5	599/18	583/16	633/15
Biology	499/18	422/5	468/12	490/11	566/8	514/38	546/18
Physics						—/2	—/2
Spanish					532/11	—/3	580/8
French						—/3	—/1

Sir Francis Drake High School • August 24, 1998

Average Daily Attendance	
1991–92	92.98%
1992–93	94.53%
1993–94	96.82%
1994–95	97.46%
1995–96	97.80%
1996–97	97.98%
1997–98	98.24%

Golden State Examination Results							
	91–92	92–93	93–94	94–95	95–96	96–97	97–98
First Year Algebra							
High Honors	1	4	19	10	7	6	
Honors	5	11	16	14	21	21	
School Recognition	17	19	24	2	32	25	
Total Tested	47	93	117	146	172	137	
Geometry							
High Honors	3	12	19	15	20	28	
Honors	10	16	25	30	28	27	
School Recognition	17	7	12	19	21	33	
Total Tested	68	58	73	89	96	114	
United States History							
High Honors	1	7	7	6	12	16	
Honors	12	11	18	11	18	19	
School Recognition	19	20	25	25	38	33	
Total Tested	67	59	96	67	118	99	
Biology							
High Honors	4	4	15	9	13	1	
Honors	9	14	19	15	11	19	
School Recognition	19	23	21	63	63	64	
Total Tested	85	62	126	134	162	157	
Chemistry							
High Honors	2	12	11	2	7	14	
Honors	4	8	4	2	14	20	
School Recognition	11	22	22	13	22	38	
Total Tested	42	52	49	59	59	96	
Written Composition							
High Honors						12	5
Honors						15	16
School Recognition						47	13
Total Tested						114	106
Economics							
High Honors							12
Honors							13
School Recognition							34
Total Tested							108

Quest High School
Humble, Texas

Reinventing High School: Six Journeys of Change

A Case Study of Quest High School
Humble, Texas

"You Get to Drop Everything and Just Learn"

By Kathleen Cushman

Seven teenagers sit in a small conference room at Quest High School in Humble, Texas, laughing. They take turns describing the labels each of them would carry if they had not chosen this small, innovative district magnet school and instead remained at one of the two large comprehensive high schools that serve the rest of Humble's roughly 7,000 high school students.

"I would be a prep, I guess," says one boy. At his side, another puts in: "I'm the metal-head head-banger—you know, the long hair and all." A shy Latino boy offers softly, "I'd be a brain, someone who's into books. At my old school they'd probably think of me as some Satanic Goth—I did wear black." "A prep, a jock," someone else says. A blonde girl pipes up, "I'd probably be like a brainy prep—a Valley Girl." "I'd be a raver one day and then I'd be a prep the next day," says another girl, and from across the table someone explains, "They call them posers."

"I'd be the nerdy black chick," says a girl student, grimacing. "I remember everybody at my middle-school cafeteria table got really mad at me because I talked to this white chick! They're like, 'Why're you talking to that white girl?'"

It's an inevitable part of being a teenager in Texas, these students explain. In the typical high school of over 3,000 students, a chosen few—largely the jocks, the cheerleaders, the band—dominate the school culture. Perhaps 20 percent of students fall into this category, they assert. ("You just better be friends with one of them," says one girl.) The rest are "hall-walkers"—a term that embraces dorks, techies, theatre nerds, head-bangers, all the ruthless tags these kids know could brand them, unexamined and unchallenged, throughout their high school years.

Instead, they came to Quest.

In the fifth year since its January 1995 opening, this school still enrolls fewer than 200 students. And in its brand-new halls and classrooms, these students have shared a social and academic experience so different from that in a typical comprehensive high school—not just in Texas but in most districts across the nation—that it has given them a uniquely heightened consciousness of what they are attempting. As one student describes the Quest experience, "You get to drop everything and just learn."

"You look past the stereotypes here," a senior boy asserts. "You learn to accept each other for who you are, and you learn about each other on different levels"—in classes, in advisory groups known as "families," and in the service learning projects that students carry out every Wednesday morning.

As they get up to leave the conference room for their next class, these students joke with each other, warm and companionable. They are anything but misfits.

Creating Quest

Humble Independent School District (HISD), located north of Houston on U.S. Highway 59, covers 90 square miles in Harris County. It includes the communities of Atascocita, Humble, and Kingwood and is the area's largest employer, with 29 schools, about 23,000 students, and nearly 1,700 teachers. In addition to Quest, the district has two traditional comprehensive high schools (Kingwood and Humble), two ninth-grade campuses, and a self-paced program for older students (PACE), six middle schools, and 18 neighborhood elementary schools.

The Quest students are certainly right that their school is different. One has only to drive by the vast Kingwood High campus and watch from a distance the gleaming strut of the 350-member Kingwood Mighty Military Marching Band. This is Texas, where, as one male Quest student puts it, "Bigger is better." Textbook decisions come down from the state; to graduate, high school students must first pass the TAAS state standardized tests; and football practice dominates scheduling decisions at most schools. Academically as well as socially, schools are highly ordered, especially the high schools: tracking for "ability levels" is routine; curricula and testing follow traditional patterns; teachers rarely team across disciplines.

Here in suburban Houston—where more than 90 percent of students pass the TAAS tests—the system appears to work just fine. The dropout rate is less than 3.5 percent, attendance hovers around 94 percent, and the football teams regularly win the state championships. Yes, the high schools are enormous, district leaders say, but virtually any student can find a niche in the extensive extracurricular organizations they provide. The success of the conventional curriculum and the pedagogy that prevails, they maintain, speaks for itself in the Humble schools.[1]

Yet not all students thrive in conventional large high schools, the district leadership acknowledged. Some have trouble mustering sufficient interest in academic subjects they regard as unconnected to their lives. For some, to adjust socially requires a more personal setting—one that Thomas Sergiovanni and others have called a "communitarian."[2] Going to either Kingwood High School (2,600 students in grades 10–12 and 1,000 in a ninth-grade campus) or Humble High School (2,300 in grades 10–12; 750 in the ninth-grade campus) might actually spell disaster for such youngsters. "I personally know several students whose lives Quest has definitely saved," says John Miller, who, as the district's assistant superintendent for secondary schools, initiated the school's development.

In fall 1993, the district issued a bond to house several alternative programs under one new roof. Humble needed a facility for its two programs—one long-term and one short-term—that tended the academic needs of youth in trouble. It made sense to use the same 60,000-foot proposed plant for a number of other existing alternative programs as well—one for English-language learners, one for pregnant students, Head Start and Early Head Start programs, a day care center, and a General Educational Development (GED) program. And in this Community Learning Center, reasoned Miller, why not simultaneously launch a small alternative high school, a setting in which students unhappy in a large high school might thrive?

Miller was proud of the district's two large high schools, which boasted high test scores, excellent college admission rates, and extracurricular participation. Kingwood High School was rated "Exemplary" by the state department of Education and Humble High School "Acceptable" (largely because of the achievement gap between students with more advantages and the lowest-achieving students—often students of color from low-income households). But Miller knew that many students were slipping through the cracks—students whose strengths matched poorly with eight-period days, traditional pedagogy, and "shopping-mall" course selections in which teachers could rarely get to know students well over time.

Quest would be the answer, he proposed. The superintendent's cabinet assembled a core team of teachers, parents, and district administrators that would take a full year to read, think, and plan the new school together. This group came both from the comprehensive high schools and the smaller, specialized programs for young people

[1] In the Texas Education Agency's official 1999 accountability ratings, Quest received a "Recognized" rating. (Other options are "Acceptable" and "Exemplary.") Humble ISD currently has 14 Exemplary schools and three Recognized schools, while holding Acceptable status as a school district. To be a recognized school district, at least 80 percent of all students and 80 percent of students in each sub-group must pass the reading, math, and writing portions of the Texas Assessment of Academic Skills (TAAS). Student sub-groups are African-American, Hispanic, white, and economically disadvantaged. In Humble ISD, more than 90 percent of all students passed each portion. However, Humble ISD fell short of the 80 percent passing rate in some of the subgroups. The district did meet other requirements for being recognized, including having a dropout rate of 3.5 percent or less for all students and for each student group, and a 94 percent attendance rate.

[2] Sergiovanni, Thomas. April 1993. "Organizations or Communities? Changing the Metaphor Changes the Theory." Paper presented to the American Educational Research Association, Atlanta, GA.

in trouble. In a move that would have lasting ramifications, the group recruited Kim Huseman, a teacher who had begun connecting youth in one of the special programs with local service opportunities to increase their engagement and motivation.

After a year of reading, thinking, visiting innovative schools, and endless discourse among the planning team members, the result proved to be strikingly close to Theodore R. Sizer's cutting-edge "Horace's School."[3] As Quest realized the affinities, in fact, it established close ties with Sizer's Coalition of Essential Schools and has gained considerable professional support both from a CES Regional Center based in Houston and from the Coalition's national network of like-minded schools.

"Essential schools" share a set of ideas known as the Common Principles, which guide their whole-school reform efforts. These principles call broadly for schools to set clear and simple goals about the intellectual skills and knowledge to be mastered by all students. They seek to lower teachers' student loads, personalize teaching and curriculum, and make students' work the center of classroom activity. They would award diplomas based on students' "exhibition" of their mastery of the program, rather than by accumulating credits or seat time. They aim to create an atmosphere of trust and respect for the school, faculty, students, and parents, and to model democratic practices and honor diversity.

Quest's early planners embraced all these ideas and set about planning to put them into practice. As they did so, Quest's path took a crucial early turn—not just to provide an "alternative" program that would serve those who did not fit well into the district's comprehensive schools. Rather, Quest would create a laboratory in which teachers and students could try out innovative "best practices" and possibly serve as a model for other educators in the district and nationwide.

As with many small, progressive schools, Quest ran the risk of alienating fellow educators in the district rather than drawing them into the search for alternatives. At the same time, its physical location—in the middle of a new building that also housed various programs for "problem" or otherwise different students—would stamp Quest with a stigma that would linger as the new high school turned its progressive ideas into reality.

The Restructuring Design

Early in its planning year, the team eagerly embraced the concept of its new school as a "learning organization," in contrast to the "factory model" of typical schooling. The planners had encountered this distinction in the work of Peter Senge and others, and when Colorado educator Rexford Brown spoke on the same topic in Houston in October 1993, Quest planners adopted his rhetoric as their own (*see box on next page*).

The Basics

After several months of reading and discussion, the planning team drew from these theories the basic aspects of how their new school would look:

- Its goals for student learning would be organized around the application of knowledge, not around "the regurgitation and display of information."
- It would link students and their academic work to the community.
- Its predominant pedagogical approach would be active and project-oriented, integrating and organizing academic work around themes and "essential questions."

[3] Theodore R. Sizer. 1992. *Horace's School*. Boston: Houghton Mifflin.

Quest High School As a Transformed School		
	Factory Model	**Learning Organization**
Community responsiveness	Closed to community; unable to be responsive	Open to community; able to learn/change with the times; community as learning site
Planning	Highly centralized	Distributed widely through all levels of the system
Decision making	Top-down, "command and control"	Shared decision making
Knowledge flow	Bottled up and fragmented among "experts"	Flows throughout the system
Innovation	Low priority	High priority
Teacher's role	Deliverer of knowledge	Facilitator of learning
Values	Little discussion; little chance of change	Constant exploration of values/purposes/norms
Management style	Telling others what to do; assessing performance	Raising questions; facilitating discussion
Resource use	Spent on disputes/ reinventing wheels	Sharing/invention/creation

Quest planners reproduced this table with the following credit: "Notes from 'Redesigning the Education System for More Thoughtful Schools': presentation by Rexford Brown: Region IV Education Service Center, Houston, Texas, October 21, 1993."

- It would organize students and teachers in flexible groups to meet individual academic and other needs.
- Its school day would incorporate both core academics and substantial time for independent work and activities chosen by students.
- Its accountability structures would be organized almost exclusively around the school's learning objectives.
- Its management would be collaborative and inclusive.
- Its building design would support the academic objectives.

The following pages explore each of these aspects in detail.

Applications of Knowledge

Above all, the planning team wanted to create a school that defined learning as much more than "the regurgitation and display of information." Led by Carol Ann Caveny, who previously a taught world history at Kingwood, the team painstakingly developed a "standard set" of expectations for what students would know and be able to do. The set fell into three parts:

- *Academic Foundations,* which included mathematics, social studies, foreign language, science, English language arts, career education, health and physical education, and the creative and performing arts;
- *Essential Learner Behaviors,* which comprised problem-solving and critical thinking, communication, self-discipline and social cooperation, citizenship and concern for the environment, and wellness and aesthetic appreciation; and

- *Workplace Tools*, derived from the U.S. Labor Department's "SCANS"[4] competencies and including systems, resources, technology, information, and interpersonal skills.

Under each category, the team listed several "proficiencies" that described how the student would demonstrate the expectation in action. For example, to demonstrate *communication* the student "attends, receives, interprets, and responds to verbal messages and non-verbal cues," and so forth. Then, "instructional objectives" further defined each of the proficiencies (e.g., "completes an oral interview with peers, community members, or prospective employers"). The standard set's language and organization drew heavily on that of national disciplinary organizations (such as the National Council of Teachers of English), state curriculum frameworks (such as those issued by the Texas Department of Education), and other efforts to articulate standards for high school students.

Spelled out in detail, the "standard set" comprised 542 separate expectations that students would have to meet to graduate. It created a framework for tracking student progress: when a student failed to live up to a standard, the record would delineate a "deficiency" on which he or she must make good. Teachers could generate various rubrics by which to assess virtually every assignment they devised—including not just the conventional four levels of prowess, but "advanced mastery" indicators for students seeking extra challenge.[5]

The standard set formed the spine of the Quest curriculum—the behaviors and concepts around which teachers would design the integrated "exploratory" courses, as well as those in more focused academic areas like upper-level math, science, and Spanish. Over the course of four years, the team decided, a student would encounter each of these expectations via at least one of the curriculum units the staff devised. Held together by broad themes and "essential questions," these units would guide students toward mastery of conceptual understandings, "habits of mind," and workplace-related skills.

To help people understand the curriculum framework, the team visually depicted it as a cube-like figure in which one dimension represented the eight Academic Foundations, another represented the five Essential Learner Behaviors, and the other the five Workplace Tools. Each of its 200 component cubes stood for a "proficiency area" (including several "learning objectives"); each also stood for various dimensions at once. ("The *tools* are what you use to acquire the *behaviors*, within the context of *academic foundations*," the planners explained.) If a school year held six six-week assessment periods, each period could aim at developing and reinforcing, through curriculum and instruction, roughly 20 of the 542 learning objectives students would need to master before graduation

It was a powerful notion, if potentially problematical. Rather than being held together by the traditional high school "courses" in various subjects, Quest would organize the curriculum and assessment around what students would know and be able to do.

The idea imbued the school design with considerable flexibility: if a student could meet an expectation by, say, volunteering at a local law office or elementary school, why not take advantage of that venue for learning? And if the study of ancient

[4] The SCANS competencies take their name from the acronym of the task force that developed them, the Secretary's Commission on Achieving Necessary Skills.

[5] See Appendix A, "Protocol for Designing Rubrics for Instructional Objectives, Quest High School."

history could also provoke consideration of the mathematical principles displayed in its art and architecture, why not give credit for mathematical understanding along with the usual historical expertise?

Links to the Community

Partly because they were inherently cross-disciplinary, many of the curriculum units that the planners foresaw were rooted in projects or connected to real-world applications. The planners sought out rich problems in which to ground the units, and the public exhibitions of the resulting student work.

For example, when Quest opened, a unit on the Vietnam War asked the driving question, "Where do we stand?" For six weeks, students read widely on the history and politics of the conflict, conducted policy briefings, explored the use and physiological risks of chemical agents in war or peacetime, and researched the use of music as the language of arousal during wartime. At the project's culmination, they constructed their own memorial wall, with each student posting the fruit of his or her individual research—artifact, interview, map, montage—against a background of black, white, or gray, depending on the conclusion the student had drawn.

Equally important to help students build the desired proficiencies, the planners believed that the curriculum needed a strong service learning component. What better application could students make of their skills and knowledge than real-world situations within the Humble district itself? Authentic community settings would add meaning to the learning objectives—especially communication, self-discipline, citizenship, information, and interpersonal skills. Students would practice these skills with outside adults, in situations where they felt genuinely needed.

Requiring students to fulfill the expectations of the standard set partially through service learning had an additional advantage: it would free time for academic teams to collaborate on professional development and curriculum planning during the half-day each week the students spent in the community. Nonetheless, service learning would require strong leadership to coordinate and supervise the activities and to ensure that real learning ensued from the projects. Because of her previous experience and strong interest in this area, the planners early on delegated this key segment of the school's development to Kim Huseman.

An Interdisciplinary, Inquiry-Based Approach

The Quest staff devised themes and questions that could drive inquiry for six weeks across several disciplines, rather than proceed lockstep through a textbook series of concepts and drills in separate subject areas. This approach would require students to take an active role in their own learning. Quest planners went so far as to dub teachers as "facilitators," a term that would persist as an identifying mark of the school's culture.

Held together over four years by a loosely chronological historical framework (from prehistoric to modern times), the curriculum was designed to launch consecutive investigations in six-week units driven by "essential questions." The first year would start, for example, with a unit called "We Are Family," asking "Where is the 'I' in 'Group'?" and "Is mankind part of a system?" Students would be assigned activities—readings, journals, artistic creations, scientific explorations, research projects, oral presentations—to complete as individual or group work, during a set time frame but at their own pace. At the end of a specified period—typically, six or twelve weeks—each student or team would complete a major "performance task" that would exhibit mastery of the 15 to 18 learning objectives for the unit or two just covered.

In the original design, the team intended almost all of this work to take place in extended, mixed-age classes known as the Exploratory Foundation. In this setting:

- Students from all four grades (9 through 12) would mingle for academic work in a "house" of 90 to 100 students, served by a team of four "instructional facilitators" and at least four support staff. Each facilitator-support staff team would lead a "family" of roughly 20 students, which would remain constant through a student's Quest career.
- Students would attempt the same tasks but at increasingly high levels as they grew older and more competent.
- Teachers from all disciplines would contribute expertise via curriculum planning, lectures, assessing, and coaching individual students and small groups.
- Skills and content from the separate subject areas—language arts, social studies, science, math, Spanish—would be taught as the "need to know" emerged in the unit's projects.
- Independent and small-group work, as well as additional content-area coaching, would take place on an ad hoc basis during the extensive unscheduled time surrounding the Exploratory Foundation class meetings.

This design would undergo some revisions as Quest tried out its ideas with real students and teachers in the first years of operation. Still, many of its crucial elements endured the "reality test" and, five years later, remain among the identifying characteristics of a Quest education.

Flexible Grouping

The original plan called for students, for the duration of their time at Quest, to belong to a single "family" group headed by at least two adults and including students from all four high school grades. Several "families" would make up a "house" occupying shared space. Parceling out the teaching and assessing responsibilities among themselves, the adults in a particular house would take responsibility for coaching and advising students as they progressed through the learning objectives.

Most of the adults in a house would collaborate on the core Exploratory courses. If necessary, others would lead separate courses in math, science, Spanish, or wellness. In particular, a significant contingent of paraprofessional staff would contribute to lowering the ratio of adults to students in academic and other areas, helping ensure that every student would be known well by at least one significant adult.

Independent Work

Quest would expect students to manage their own time for much of every day. In morning "family meetings," they would fill out the day's schedule, indicating when they would be occupied with course meetings and what their choices were for the remaining time blocks. If students needed extra time for research, taking a long walk, or tutoring, the school's design put the decision to schedule it directly into their hands.

Accountability For Learning

All students would address all objectives, but a "Personalized Learning Plan" would spell out individual expectations for the level at which each student would achieve instructional objectives. Weekly progress reports would go to parents on Fridays, indicating which assignments had been completed, which were in revision, and which not yet attempted or assigned. Formal reports of student progress (spelling

out any deficiencies) would be sent home every six weeks,[6] supplemented by frequent phone calls from teachers to families. Student work would be expected not just to pass but to achieve 80 percent of the expectations outlined in the Quest standard set. Students would revise the work as often as necessary to achieve 80 percent, getting extra help in "content seminars" or, ultimately, in summer-school sessions.

The planners envisioned that students who met Quest's learning objectives would also meet most, if not all, of the expectations called for in the "Texas Essential Skills and Knowledge" framework and the Humble district's "Content Standards." The planning set out an array of assessments by which this would take place:

- Traditional achievement tests (TAAS, SAT, ACT, and MAT);
- Rubric assessment (at mastery level 3 or better);
- Traditional exams (in a score range of 80 percent or better);
- Continuous feedback from staff until mastery level is attained; and
- Performance-task-based, authentic, or real-world demonstrations.

A simple transcript was prepared for listing student achievement in two ways: "Quest Outcomes Met" (listing the Essential Learner Behaviors, Academic Foundations, and Workplace Tools) and "Generic Course Credits" (listing subject-area credits the curriculum comprised).

Collaborative and Inclusive Management

Teachers cannot belong to unions in Texas, so various management issues that would derive from contract negotiations—time spent on the job, for example— are moot at Quest.[7] Instead, Quest would rely on the willingness of teachers, students, parents, and community members to help shape school policies hand in hand with the principal, assistant principal, and district higher-ups. A site council of representatives from these groups would advise the principal at monthly meetings. Teachers would arrive at decisions together about curricula, schedules, spending and staffing priorities, and the like. Staff would play a part in their own evaluation procedures, setting goals, and tracking their achievement. Students would take a key part in conflict resolution and mediation processes. The school would emphasize communitarian, not hierarchical, values and procedures.

A New Building Design

Quest planners were closely involved in the design of their new building, the 60,000-square-foot facility they would share with several other programs. As they developed the school's instructional program during the planning year, they tried to imagine and convey to the architects what implications instruction might have for that design.

For example, they projected serving a total of 400 students organized into four "houses," so they asked for four "pods" of flexible learning spaces built around a learning resource center for each house. Envisioning work by large groups, small groups, and individuals, they asked for folding walls or partitions easily moved by teachers or students. They also wanted plenty of "break-out" spaces and small conference rooms. To aid students in their independent work, the planners sought good numbers of networked computers for each house, as well as a central resource and media center to house library materials, technology, and computer workstations.

[6] See Appendix B for "Quest High School Report Card."

[7] Faculty contracts are renewed on the basis of evaluations by the principal and other district administrators.

The Design in Practice

Quest opened to 180 students in January 1995, after a fall in which teachers "did everything from choosing paint colors to ordering books," as teachers Carol Ann Caveny and Kim Huseman recall. Many teachers from that initial period are still at Quest five years later, and they speak of the enthusiasm and intensity—and anxiety—that marked the first few months after the students arrived. Would the idealistic design survive in the face of real adolescents who had never encountered anything like it in school before? Would it survive when real teachers had few models to look to when seeking for support in the new ways?

For example, as the school building design neared its completion, the program design had not matured; for this and other reasons, the architectural plan contained elements that quickly created important space problems. When the school opened, the student body was only half the originally projected size, yet the staff realized they would need to use three of Quest's four pods. The school divided the students into two houses of roughly 90, each occupying one pod. However, designed according to state guidelines for classrooms, the "pods" were too small for classes of high school students working actively, rather than sitting in neat rows of small desks. Thus, the staff subdivided the third pod into a place for large group meetings. For example, Exploratory Foundation lectures have met there in groups of 30 to 35, while other students have worked independently or in small groups in their home houses. PACE, a program created after Quest, needed extra space and took the fourth pod. "If we did get another 100 kids to come, the agreement was that PACE will move," Parsons says.

Who Came, and Why?

A partial answer lies in which students chose to attend the new high school and what they were expecting to find there. Early in the planning year, Quest planners had visited every middle school and high school in the district to present the program to potential students.

In the fall of 1994, interested students came in for individual interviews that were designed to make clear Quest's unusual expectations for academics and time management. The school accepted virtually all who wanted to come, as long as a "full-inclusion model" could accommodate any special education requirements: Quest designated no staff for "pull-out" programs, planners say, because other district high schools were already provided such programs efficiently.

The first Quest student body reflected almost exactly the district demographics and ethnic makeup: 84 percent of the students were white, 10 percent African-American, 6 percent Hispanic, 9 percent with identified special education needs, and 16 percent identified as qualifying for free and reduced lunch.

They numbered 180. That was everyone who wished to enroll; also, the district's operational budget supported Quest staff for 200 students. "The district was pulling money out of thin air," Parson recalls. "They had to cut and paste and pull from other places." For example, several Quest teachers were technically "permanent substitutes" with occasional responsibilities at other programs in the building. The student-teacher ratio was 17 to 1, augmented by enough paraprofessionals and instructional aides to lower the number in practice.

Hindsight makes clear that the earliest students who elected Quest included a substantial number who expected that the school's emphasis on self-structured time

and personalized learning meant they could do pretty much what they liked. John Miller explains:

> *The first three months or so we were open, there were numbers of kids that really thought they were coming to have a free ride and a good time. Many of the kids who started worked hard when they first got here, but many of them didn't. You would walk through classrooms with kids visiting or sitting on the floor, and you might come back six hours later and see the kids still sitting in the same spot, still chatting.*

Lynn Parsons, one of the early planners, remembers wrestling throughout the first year with the question of whether to look for young people who were ready for this kind of learning environment or to expect the learning environment itself to turn them around:

> *We were having a lot of trouble with kids sleeping and not doing anything and not turning in work. So we decided we had to have a better interview process to make sure we know who should and shouldn't be here. Then there was the question: "Do we want to take on the discipline problems of the world?" Some of those initial four teachers still believe that if kids have discipline problems it may be because they are coming from an inappropriate structure, and we ought to let them in and let them prove themselves.*
>
> *[In the first year] we learned more about what attributes make a kid successful here—primarily motivation and the willingness to work hard and independently. Of course, schools are supposed to build that, and that's the rub: how do you predict how much of past motivational problems were because of structures they were rebelling against or whatever?*

In the years that followed, admissions interviewers have taken more care to alert students and families to Quest's particular demands. According to Parsons:

> *Nothing was ever stated about academic ability, about behavior, about discipline; it was just a feeling. It wasn't turning someone down, it was just advising the student and his parents, "We really don't think this is the right place for you because of these reasons." We even negotiated with some kids: "If you stay in your current school for one more semester and you can demonstrate your willingness to try, and you don't get sent to the office a lot, then you can come here." We were allowed to do that; the district was behind us.*
>
> *Now they have an interview process with several staff members that sit with the student and their parents, sometimes together, sometimes separately. They do a baseline interview to judge where the student is academically because they've learned not to trust grades. So they say, "Show me some math; give me a writing sample." And when they talk with the child, they say, "Do you realize that when you get here you are going to be expected to read and write this or that?"*

Still, Quest's early reputation as a place for students with motivation problems lingers among many of the community's educators. One parent, for example, reported that "people badmouth it, teachers or principals even. They say, 'Why is he going there? Isn't the regular school good enough?'" Another parent talked about how excited her daughter was to leave Humble, but then she had her exit interview from her old school and she got the idea from them that Quest is "for people who can't learn." Finally, one parent asked, "if the school district thought this was a good idea, why don't they publicize it?"

Another key question arose early on concerning the school's identity and capabilities, as word spread among parents of special education students about Quest's individualized approach and full-inclusion policies. "At one point we had an inordinate percentage of special education students compared to the percentage in the district," Parsons observes. "We would attempt to meet their individual needs within the structure of the school—our philosophy was to individualize everybody anyway, so why couldn't we individualize for this? We had special ed.-certified teachers on the staff, and we made sure they were the case managers so we could meet the requirements."

Parents, students, and staff realized fairly soon that other district schools could better address certain learning disabilities requiring intensive pull-out instruction. The interview process began to counsel such students away from Quest, and by 1999 the percentage of Quest's special education students more closely reflected that of the district.

Curriculum, Instruction, and Assessment

As the first year turned into the second and third, the initial Quest faculty members kept their focus doggedly on high expectations for every student. The assessment system they had designed—literally to record when each student meets each learning objective—made it clear to students that they could not slip through unnoticed. Although student motivation and engagement continued to be somewhat of an issue, students began to see they were going to have to meet Quest's standards. The strategy, Miller says, began to pay off:

> *The staff told me, "Our strategy, at least right now, is to outwait the kids." For the kids to decide for themselves that, "Okay I guess I could sit here and waste my life away, but eventually I'm gonna start having to do some work." And for the most part, that pretty much is what happened. As time looped on during that first year you saw more and more kids engaged in doing what they were supposed to do.*

At the same time, teachers began to adapt the ambitious Quest curriculum as they observed it in practice. The crucial Exploratory Foundation courses, while mostly successful in engaging student interest, had some drawbacks. However, students were not increasing their skills and knowledge as reliably as the faculty had hoped in certain subject areas for which teachers depended heavily on a sequential mode of presenting concepts—for example, Spanish and advanced math and science.

Despite "content seminars" and tutoring to augment instruction when necessary, student work looked significantly stronger in the arts and humanities projects emerging from the Exploratory courses than it did in math, sciences, and foreign languages. By year three, the Quest staff had allocated separate classes for those three subjects, and its schedule began to look more like that of a very flexible traditional high school that combined English, social studies, arts, and some math and science into a long time block, while teaching Spanish as well as upper-level science and math in shorter periods.

Once students understood the complexities of working toward the standard set, they also seemed to work well together in Quest's mixed-age classes. Yet it tended to take up to a full school quarter for that understanding to develop, so the faculty gradually decided to put new ninth graders into a group together for Exploratory classes but separate from the other three grades. There, teachers could take more time to explain the system's workings—the learning objectives, the "deficiencies," and the assessment rubrics.

Through frequent conferences with parents and students, teachers educated families as well as new students about the Quest system. A new parent commented on this:

> *One problem for beginning kids—even the families—is that they feel overwhelmed their first semester. I can remember a few years ago looking through the guidebook and trying to figure out all these rubric terms and everything—it was like moving to a foreign country. They go out of their way now to try to correct that problem. It's important for them to see these kids succeed, so over the years they have developed a way to support the beginning kids and expect more of the older ones.*

One student arrived at Quest as an eleventh grader after bouncing with serious behavior problems through several high schools. He remembers his initiation:

> *They explain it really simply, but you don't really understand it until you actually do the work. I didn't do the work; I just sat there. I did a couple of things, but I really didn't care at first. I was at a moderate level—I wasn't failing, but I wasn't taking all my work to heart yet. But I walked in [to my first parent conference] and my facilitators laid out that I've met these objectives and I'm deficient in this, this, and this, and. "And the reasons why are—?" And I had to come up with the reasons. And what could I say? "My teachers don't like me?" That's doesn't apply to Quest! Everybody here at Quest cares. Quest is totally about personal challenge. That made me realize—I had a reality shock. My facilitators told me, "If you want to go to college you have to do all these things and then stay current." At the time I didn't even think I would graduate high school, and I didn't care. The challenge made me care. When you understand your objectives you can go out and actually put your heart into it and do it. Even now, at college, the first thing I do on every assignment is state my specific purpose for that assignment.*

One notable success of the Quest system grew from its insistence that students complete all work to a "mastery" level. The staff put so much commitment and time into this aspect of the academic culture that students soon grew accustomed to doing multiple revisions of their work before any project was complete:

> *When we turn something in, if it's not perfect we have to turn it in again and again and again—it has to be more than good enough. Everything here has to be Quest quality, which means 80 percent of perfect. When you turn it in the first time, it's usually good enough [for most schools]—but my record was revising seven times. In my Spanish class in college I've really taken the habit of revising over and over again.*

Retaking tests became a normal part of bringing work up to standard; teachers now routinely devise a number of different versions of an assessment to make this possible. In a geometry class in October 1999, a tenth-grade boy handed in a test, remarking, "I know I'm going to have to take it again." Before he left class he collected a weekly update on his progress that term from the teacher, who sat at a computer printing out student reports. The student had several hours of flexible time next in his schedule, and he planned, in addition to eating lunch and playing handball, to seek out math tutorial help in the large room where his "family" spent their time. "There's a table that always has someone there to help with math," he says.

Parents also favorably regard Quest's policy of pushing not just for a passing grade, but for mastery: "If my son came home with a 65 or 75 in chemistry at a traditional school, that's it, if they haven't mastered it they'll go on to the next thing. But here they'll keep teaching it until they get it, and I think that's really critical." A number

of parents talked about how their children took algebra tests four times before getting the required 80, or went to summer school, or worked with tutors.

As students adapt to the Quest system, the element of independence in how they carry out their work seems to gain increasing importance. A recent graduate recalls:

> *The teachers are like, "You need to do this, so go do it." They don't stand over you, they don't babysit you, they don't say what you have to do exactly when. It's just if you do it, you get credit, and when you've done what you need to, you can graduate, even early if you like.*

Current students had similar perspectives on the curriculum:

> *You don't do busywork at Quest, tedious assignments that don't really focus into your life, that you're just trying to quickly get it over with. It's a growing process, in my opinion. It's...forcing yourself to take responsibility, to grow and make yourself learn...instead of someone else saying, "Here, learn this, you're going to learn this way." I think overall the level of expectation academically is much higher than most schools. And also it's like time management...you have to manage your time yourself. Or you're just not going to be able to graduate.*

Effects of the Family Group Structure

The time Quest students spend in their "family groups"—20 minutes at the start and end of every day—has shaped the school culture in important ways. A "family" consists of some 25 students in all four high school grades and stays together for the duration of a student's time at Quest, taking in new ninth graders each year. Important parts of a school day are spent in that family group as well. For example, students working on their own in unstructured time do so in family group spaces.

Several adults lead each family—one or two "family heads" and one or more instructional assistants or permanent substitutes. They do everything from taking attendance to academic coaching and assessment, communicating with parents, and keeping track of student progress toward completion of promotion and graduation requirements.

A family's social bonds grow strong over the years. Time is spent on building group skills through "ROPES Challenge" courses and other trust-building activities, on talking through behavior and climate issues that face the school community, and on just having fun.

One family group reflected recently on how to strengthen its own group culture, which they thought had suffered for lack of attention. A family's purpose, students wrote, should be to "set us apart, prevent us from falling through the cracks;" to "vent, have people to turn to, talk to, and support;" to "get to know people and not feel like you're forgotten;" to "bond;" to "really get to know others;" to have "direction in finding out who you are."

A look at the student work displayed in the hallways gives a vivid sense that Quest continually helps students take off the masks that many adolescents wear to protect themselves from the judgments of their peers. Reading work like student artists' rationales—generated from a unit exploring prehistoric artifacts, with each student creating his or her own "petroglyph"—it is easy to see how the family group culture has helped build these students' reflective capacity:

> *For my petroglyph I chose a fox which is zoomorphic. I decided to relate myself to a fox because foxes are cunning. When it comes to a difficult or dangerous*

situation, I can think quickly in sticky situations.... Being small helps them by being able to outmaneuver larger animals that are trying to eat them. I like that foxes and most animals are independent because I have always liked to be independent. Foxes are solitary animals that don't live in groups or prides. I also like to keep to myself and not to be in big groups.

Another student wrote:

With my abstract carving I choose to go with a need that is evident in all mankind and that is togetherness. My carving signifies awareness of togetherness and how it has grown into something that is part of our developmental needs and our social institutions. My carving is also showing that there is much room for growth and improvement in our quest to show love and have companionship, whether it is with our friends, colleagues, or marriage mates. I believe my caring has allowed me to express this quality of togetherness.

The Community Partnership Program Takes Shape

As Quest progressed through its first several years, the service learning program grew into one of the most powerful drivers of the school culture. Its strength lies in several elements.

Starting in ninth grade, all students fulfill some sort of service for at least two hours every Wednesday morning. Most get there in school buses, although students with cars can drive. All can eat lunch "off campus" on the way back to school, a special privilege on this otherwise closed campus. Their responsibilities include jobs in community art groups, businesses, social service agencies, governmental agencies, and elementary and middle schools. They can also work at various operations within Quest itself, such as the yearbook or the school Web site (*see box*).

Service Learning at Quest High School

In the fall of 1999, Quest students did a wide variety of Senior Group Projects:

- Develop and pilot a computer literacy training project for adult English language learners currently attending ESL classes at a program housed in the same building as Quest;
- Solicit, in conjunction with a local human services agency, sustained community contributions of services, e.g., hair styling, cosmetic services, clothing, car repair, that support disadvantaged women in the job search process;
- Create a resource guide for teachers, youth workers, and parents to use in breaking down cultural stereotyping and prejudice among groups of young people;
- Create a sustainable program linking elementary school students with elderly residents of a nearby nursing home through mutual visits, correspondence, and invitational programs;
- Create activities for fifth-grade students aimed at fostering respect for diversity and resolving conflicts in non-violent ways; and
- Increase volunteer involvement, including improvements to building and grounds, at a local adult day care center for people with mental and physical handicaps.

To prepare for their service learning experiences, students receive several weeks of orientation at the start of each year. They reflect on their previous year's experience (if any) and set goals for what they want from their current year's choice for service learning. There is a program coordinator who helps match students with placements, as well as performing a number of other critical tasks.

At their service site, students receive brief but frequent check-in visits from either the program coordinator or one of several instructional assistants who work with her. These adults observe students at work and consult with supervisors at the site about any problems that might develop.

The program coordinator formally assesses all students' service work, tying it to 49 specific "learning objectives" in Quest's standard set (22 learner behaviors and 23 academic foundations, all having to do with career education, plus four "workplace tools" drawn from the SCANS competencies). At the end of each service stint, students also assess themselves and write reflections on what they have learned. Workplace supervisors fill out an evaluation form at the end of every semester.[8] The program gives special recognition to students who excel.

In the senior year, each student completes a major service-learning component as part of the capstone exhibition prepared in the Senior Exploratory course. In small, self-selected groups, students decide on a topic of importance to the community, then create and carry out a sustainable service project that relates to it. At the same time, each student in the group writes an individual research paper about some aspect of that topic. This work is assessed not only using the service-learning objectives but also other Quest learning objectives, some of which students designate themselves.

Kim Huseman, who has developed and coordinated the program since its beginning, regards the consistent building of student skills across four years as the most valuable factor in Quest's community partnership program. By 1999, the first year in which all seniors must complete the service component of a Senior Exhibition, the program had reached a new point of maturity and schoolwide importance. Huseman notes:

> *[By the time they] the kids get to be seniors and they're doing their service learning projects, there's been a diligent practiced behavior over a long period of time on a consistent basis with active reflection throughout. I think that's one reason these projects are fairly sophisticated, because they already know how to go do some of this stuff.*

Students talking about their service experiences clearly regard the service program of value both in building their academic skills and in developing socially, emotionally, and ethically. Many continue their service experiences into the summer. "After you get out of school, what are you going to do?" one student said. "You're going to have all this knowledge but what about your real world experience? I don't care if you have a 4.0 [grade point average]. If you can't deal with people it's no good. You have to apply your academics to society."

Many of the students describe what they gained from their service experiences in detail, with considerable enthusiasm:

> **Ross:** *You know you've really learned something when you can teach it. Before Quest I wasn't really reading. I did all my learning from my friends—I learned*

[8] See the Appendix C for the student evaluation form.

about cops, about girls, about how to run from what's facing me. Quest expects you to meet more than that. Like when I was tutoring second graders in reading. I could understand a lot of their difficulties, the ADHD or what you call it. I have auditory and visual dyslexia.

Crystal: *My community service [taught me] to take responsibility for the things you say and do in front of kids, and to be more patient with people in general. And I think that helped me with my schoolwork, because you have to be responsible there, you have to get everything organized—we do it ourselves, the teachers don't do it—so it made me want to organize my work more, and do it more efficiently, quicker.*

Robert: *You also learn to work with people that are in your same group, because a lot of the times we'll argue about some things that we're doing or some things that we could be doing better within that group. But we learn to work together...and eventually later on when you're in the workplace or something, you're gonna work with people that you're gonna argue with, and you're gonna work with people that you don't see eye to eye. So this will help me to where I can give and take, I can bend a little.*

Danny: *We're doing a history unit at Jesse Jones Nature Center. We helped build a village based on the Colonial days, and we get little classes that come through. I'm a musician, so we build a bunch of old instruments and learn how to play them. For instance, like a washtub bass—take a washtub and get a broomstick and a string and attach it and you can make music with it. I did another community service with a music ensemble here, and we played real old music, like Bach, dating back, and like Mozart, stuff like that. We went around to middle schools and elementary schools and played our music for them and explained.*

Huseman and her students are acutely aware that Quest students are scrutinized by the community as they perform their service at various sites—and that they have the potential to reinforce or alter the stereotype many outsiders hold. "By our going out and doing work with them, it teaches them more about our school and they have more respect for us," one girl comments. Huseman reports a steadily increasing number of requests for Quest volunteers, especially from personnel in other schools,.

Many students commented on the potential that service experiences have for breaking down stereotypes and building a sense of community within the school itself:

Robert: *In a regular school you'll have your clique, your group of friends, and you will stay with that group of friends all four years, never go outside of that little group. You're in your own little sheltered box. With the community service, you go out of that. I work with people that I wouldn't normally work with, and eventually you become friends with everybody and you're a lot more open to people.*

For Quest staff and students, the value of this ambitious program of community partnerships and service learning more than justifies the considerable staff time and support that Quest invests in it. As director, Huseman spends roughly 60 percent of her time on it; the rest of the time she serves as a "family group facilitator" for a group of 20 students, interviews prospective Quest students, and helps with college counseling and advisement of new students. In large or small ways, several other adults help Huseman, including an assistant (shared with the school's curriculum coordinator), two "instructional assistants," a "permanent substitute teacher," the physical education teacher, and a library aide. In addition, the school has to fund bus transportation to the sites.

The Professional Community Develops

Building a collaborative professional culture has been part of Quest since its earliest days, when the planning team spent much of the first year reading and discussing the educational literature and working through the design issues of the school together. That aspect of school life received a considerable boost from two professional networks: the Coalition of Essential Schools (CES), and the Houston Annenberg Challenge.

Early on, for example, many Quest staff members received training to lead the "critical friends groups" (CFGs) being promulgated by the National School Reform Faculty, a project of the Annenberg Institute for School Reform at Brown University from 1994 to 1999. CFGs are collaborative groups of teachers and administrators who meet regularly with a trained "coach" to improve their practice, increase student learning, and hold one another mutually accountable professionally. Members of the National School Reform Faculty share a common language: they speak of "looking collaboratively at student work," of becoming "reflective practitioners," and of turning schools into "learning communities" as major strategies operations for achieving whole-school, systemic reform. But the NSRF initiative rests on the belief that school people must construct their own learning from a cycle of experience and reflection, not from some outside expert telling them how to do their work better.

A three-year CES Networking Grant ($3,000 in its first year, and $2,500 per year in its second and third years) funded CFG coach training for curriculum coordinator Carol Ann Caveny and much professional development for other faculty, including attendance at local conferences, the CES national Fall Forum, and retreats led by the CES Regional Center in Houston. Later, when the Annenberg Challenge awarded funds to a Houston public-private partnership, Quest became a Beacon School, receiving $200,000 per year for two years, then a decreasing amount for two more years, to fund additional professional development and documentation. Seven more faculty members received training as CFG coaches with Annenberg funds.

The 30 adults on Quest's staff meet every other Tuesday afternoon in small CFGs comprising four to six people. Those trained as CFG coaches take turns facilitating these meetings, which generally focus on practices and issues relating to student learning. In 1999, they began a series of meetings as one large group, centering on looking collaboratively at student work by using a set of protocols they brought from the National School Reform Faculty training.

Written staff reflections after such an exercise in October 1999 reveal both how powerful such meetings can be—and how vulnerable individual staff members can feel when sharing their own or their students work. "I would probably grit my teeth and follow through on it," noted one. Another staff member summed up the experience: "It is so powerful to have your peers give honest assessments of your practice. It is reinforcing and at the same time makes you strive to improve. It is an intense personal and professional experience."

Quest trained nine CFG coaches, more than it needed for its staff of thirty adults. But the training also provided a foundation of skills in group work. They used these skills in the three-hour Wednesday morning sessions of collaborative curriculum development, held while students go to their service learning sites. Here, teachers develop and revise the integrated curriculum of the Exploratory Foundation courses, as well as the advanced courses taught separately. They work and rework the sticky questions of fair and rigorous assessment, student mentoring and coaching, graduation requirements, course content and challenge level, student behavior norms, and

the like. "The team is made up of all who instruct in the school and all have an equal and essential voice," Lawrence Kohn and Carol Ann Caveny wrote in a jointly authored piece in 1999,[9] adding:

> *Decisions of what to teach and how are reached by consensus and by the input of all who work with students, thus creating a collective responsibility for learning.... However, getting to the point where we could have such discussions did not come easily or naturally.... The lack of practice, staff development, and expertise in negotiation created situations of conflict and stress. Teachers complained about "burnout" constantly and felt confused and fragmented both professionally and personally.*

In fall 1999, Cecilia Hawkins arrived as Quest's new principal, replacing Linda Wodka when she retired. Formerly the district's assistant director of instruction for reading and, before that, district coordinator for gifted and talented and early childhood education, Hawkins brought a new focus on instructional leadership to the principal's role. Under her leadership, the staff continued Thursday, after-school "debriefing" meetings, at which teachers reflect on what they observed in their own and one another's teaching during the previous days. Quest teachers collaborate so closely in the Exploratory Foundation courses that they not only witness each other's teaching presentations but also routinely assess the student work that results. In one Thursday meeting in October 1999, after giving feedback to a colleague on her lecture that week, faculty members debated how best to balance the demands of assessment, given their different teaching loads, subject specialties, and personal knowledge of students.

The subject had a complex history. At one time, all teachers had graded all content areas; then subject specialists had graded work in their areas; then all staff in a particular house graded those students, whom they knew best. At this particular meeting, they talked through how to ascertain reliability and rigor and how to make up for an imbalance in numbers of students between the houses. By the meeting's end, they had agreed to try a new assessment configuration, promising to come together again to evaluate its effectiveness.

"One hallmark of the Quest High School culture is the shared-decision-making model via consensus, rather than by democratic vote," Kohn and Caveny write. "The entire staff makes all operational decisions and shifts in school design.... At varying times staff members assume key roles in developing and implementing changes in curriculum, school structure, policies and procedure, and discipline."

The fall 1999 shift to Hawkins's leadership as principal marked a key point in the development of Quest's collaborative leadership. Kohn and Caveny write:

> *She delegated authority, developed collaborative decision-making processes, and stepped back from being the main problem-solver. Instead, she turned to the professional community for critical decisions. Also, she defined herself at the center of the school's staff rather than at the top. She also worked effectively to stimulate professional discussion and to create networks of conversation that tie faculty together around common issues of instruction and teaching.*

Another key staff transition developed in October 1999, when Carol Ann Caveny, who had led the design of Quest's distinctive curriculum since the planning year, resigned

[9] Kohn, Lawrence, and Carol Ann Caveny. "The Quest for Successful School Reform: Sustaining the Vision through a Systematic Model for Sustaining Change." Unpublished manuscript.

to take a position with the Houston Annenberg Challenge. Her departure coincided with the start of the "second time around" for the four-year Exploratory Foundation cycle, just as faculty began revising the units with the benefit of the pioneers' experience. A general sense prevailed among the faculty that from this point on, developing curriculum would entail somewhat less stress on their time and energies, and they could devote themselves to improving the Quest system rather than to the arduous work of creating it from scratch.

One important indicator of the school's stability is its very low rate of staff turnover overall. Most of the founding team still teaches at Quest, and few faculty have left citing dissatisfaction or burnout.

Evidence of Learning

In Quest's resource and media center, a ninth grader is working on a computer, doing an Exploratory Foundation assignment that asks him to identify and describe the parts of a cell in his own words. He uses the dictionary and a biology textbook to create a table with that information. At the next computer, a twelfth grader is doing an assignment for her math modeling class, looking up tribal African art and identifying mathematical patterns and shapes that show up in the art. She is from South Africa; home schooled for six years, she arrived at Quest as a tenth grader. She's now hoping to take a year off after high school, then perhaps to become "a psychologist or an artist."

Out in the hallway, glassed-in cabinets display student sculptures of primitive figures, with one-page typed "rationales" describing each. They're remarkably expressive: the goddess of nature, the earth spirit goddess, the lady of dance and physical expression, Mother Earth and Mother Nature, the goddess of water, the goddess of fire, the goddess of compassion, the wolf goddess, a woman of the birds and songs. One student writes of her "earth goddess":

> *My simple sculpture has become the object of my obsession. I am constantly thinking of ways to incorporate her into every assignment I have. She is a very important piece to me. The simple design of her form is directly related to her being the goddess of love. She appears nude. Clothing is of no importance to her, simply because she has nothing to hide. Her bare skin is a way for her to be seen as she really is, vulnerable. Her form is kneeling and she has no arms. This represents her inability to stop, slow down, or quicken the flow of love. She merely must proceed as nature sees fit. The goddess also has a blank face. Love is blind, therefore so she shall be. It matters not how she visually sees other people, for love is not based upon physical status. You cannot stop or speed up love. In the end you bare your soul, you take off your mask and reveal your vulnerability.*

The actual work Quest students produce—as well as the knowledge, skills, and habits they carry into their postsecondary education, careers, and lives—provides an important sense of whether the school is succeeding at its aims. A useful way to organize looking at that work is to start with the end product: the components of the graduation portfolio Quest requires and the structures it provides to get students to that end. Along with the "family group" structure and the community partnership program, the Senior Exploratory and accompanying graduation requirements drive the culture of personalization and academic accomplishment at Quest, even in the earlier grades.

Even for students who have struggled with motivation and engagement, Quest's self-paced character of student learning seems to result by senior year in serious and unusually reflective student learning. In fact, recent graduates commented on the

school's press for academic excellence in the context of their early college experiences. One college-going female student says:

> *Parents who worry that their kids won't be prepared for college—they shouldn't worry. We talk to all our classmates still, it's a small group, and wherever they go, whether it's Texas A&M, Kingwood, Baylor—they're bored. The level of challenge at Quest was very high.... The writing practice I got [at Quest] has been invaluable in my composition and rhetoric classes. Also, the first half of my senior year I worked with tech services [at Quest, as community service]. I don't have to tell you how much that helped: I exempted out of all college classes for computer literacy.*

The Graduation Plan

The Graduation Plan, another crucial element of the Quest culture, supports an atmosphere of continuous achievement across the grades. Every year, all Quest students develop or revise this ten-page document with their advisors. Signed by student, parent, and advisor, it paints a comprehensive picture of the student's skills, preferences, accomplishments, and goals. It includes:

- Assessment information (obtained and completed by the student, including all test scores and a self-evaluation);
- Previous academic performance (obtained and completed by the student, including course grades at other schools or programs and the student's self-evaluation);
- Non-academic activities and interests (completed by the student);
- Immediate and long-range goals (completed by the student, including educational, career, and personal targets);
- Goal analysis (completed by the student and advisor, comparing the student's strengths, interests, and prior performance to the prerequisites for attaining the goals);
- Quest graduation plan (completed by the student and advisor, outlining and giving a time frame for what proficiencies and objectives must be met before graduation, any advanced-level work or other curricular modifications, and any other graduation requirements); and
- Signed agreements (completed by student, advisor, and parents after a three-way conference to review and revise the plan).

The Senior Exploratory and Exhibition

The stakes rise further as students approach their final year at Quest, during which each undertakes a Senior Exhibition guided in a semester-long Senior Exploratory course that meets for two hours daily. Students apply to enter the Senior Exploratory, and they must obtain recommendations from teachers, parents, and a special Senior Committee to commence the course. Centered on the application and exhibition of the knowledge and skills acquired during the previous years, the Senior Exploratory comprises:

- Research by a small group of students into a modern problem or issue, along with an individual research paper by each student on some aspect of it, a community partnership project related to it, and a formal exhibition before a public audience;
- Career exploration including research, interviews, job shadowing, and a career plan (presented in speech and writing) that outlines what it takes to achieve the plan;
- Individual components including a personal wellness plan, CPR and first-aid training, training in a high-tech systems analysis and problem-solving program, a literary analysis, a self-portrait in the artistic medium of choice, a reflective journal, and a resource binder and learning log;

- A portfolio demonstrating completion of many of the above requirements as well as academic samples from each discipline, a resume and recommendation letter, and completed tax and financial aid forms; and
- A small-group exhibition lasting up to one and one-half hours, before a mixed audience including the senior class, other students, faculty, parents, community members, and an assessment committee. The exhibition includes a multi-media component and other visual aids, individual oral presentations, and a question period in which seniors defend and answer questions about their research.

Standardized Measures

For many Quest students, their senior exhibition is a moment of truth: they must be able to present and defend a significant piece of work they have done. Attended by parents and other community members, as well as faculty and students, the exhibition functions as a very public form of accountability as well.

In addition, Quest students take the standardized tests required by the state: the Texas Assessment of Academic Skills (TAAS) in reading, writing, and mathematics, given in grade 10 and subsequent years if necessary. To graduate from a public high school in Texas, students must pass all three sections of the TAAS test *or* three out of the four state End-of-Course tests: Algebra I, English II, and either Biology I or American History. Quest's integrated curriculum does not align well with these last two tests.

Based on its TAAS results, Quest's heavy emphasis on reading and writing appears to boost student scores, and math scores are also rising noticeably. In spring 1995, soon after the school opened its doors, 73 percent of Quest students who took the TAAS passed in reading, 88 percent passed in writing, and 53 percent passed in math.

In spring 1999, 96.5 passed in reading, 98.2 passed in writing, and 84.2 percent passed in math. This change occurred starting after the first full year of Quest's existence, and it has been sustained since then. All students take the test, including special education students. Whether the rising scores might result from differences in the students who enrolled at Quest for its first year—by all accounts a difficult group—has not been systematically explored.

Quest has also raised its early ratings in the state's Academic Excellence Indicator System (AEIS), which ranks the performance of students in each school and district in Texas every November. From 1996 through 1998 the school received an "Acceptable" rating; in 1999 its rank was "Recognized." (The lowest is "Non-Performing"; the highest rating is "Exemplary," which Quest missed only because of its math scores.) The performance indicators for AEIS include:

- TAAS passing rate by grade, by subject, and by all grades tested;
- End-of-course examination passing rate;
- Attendance rate for the full year;
- Dropout rate by year;
- High school completion rate;
- Percent of high school students completing an advanced course;
- Percent of graduates completing the Recommended High School Program;
- Advanced Placement (AP) and International Baccalaureate (IB) examination results; and
- SAT and ACT examination participation and results.

Performance on each of these indicators is shown, disaggregated by ethnicity, special education, and low-income status. The reports also provide extensive information on school and district staff, finances, programs and demographics.

Postsecondary Results

Five graduations after its January 1995 start, Quest has good records of its graduates' postsecondary choices. In the Quest class of 1999, 25 of 27 students went to college—49 percent to two-year colleges and 38 percent directly to four-year colleges. One student went into the military; one to a technical college; two went directly into the workforce. Half of the class of 1999 took the College Board's SAT tests; their average scores of 575 verbal and 534 math compared favorably with the district average (532 verbal, 536 math) and the national average (505 verbal, 511 math).

Graduates attend such colleges as Reed College, the University of Texas, Texas A&M University, Baylor, the University for North Texas, the University of Houston, St. Thomas University, Sam Houston State College, and Stephen F. Austin University. As in many Texas districts, students often start by attending local community colleges; Kingwood Community College is a common choice in Humble.

Self-Assessing, Evaluating, and Changing

Self-assessment is built into Quest's collaborative teacher culture, which draws teachers together weekly to reflect on how well their ideas are playing out in the classroom and how evident their high standards are in student work. As the school matures, its leadership is taking even more steps toward examining where it succeeds and where it could improve.

In fall 1999, Cecilia Hawkins, Quest's new principal, began look closely at the correlation between students who had high levels of absences and tardiness and those who accumulated "deficiencies" in their learning objectives. Examining these numbers, she began to worry that too many students—up to a third, by her count—were taking far too long to come up with the high-quality work they needed for mastery. "I was hoping that the 10 or 15 percent that didn't finish everything on time were the ones that were always tardy, absent, or in Wellness all the time," she says. "What I found was that the percentage of those with deficiencies was much higher, in general."

Consulting with the faculty on this, Hawkins says, she began to consider other contributing factors, such as the time new students take to get used to the Quest system. Although struck by teachers' faith that "it would all gel out by the end of the year," she still hopes to establish clearer benchmarks that will galvanize and motivate students to get on track early and stay there. "I don't believe that you can have blind faith over four years and just assume it will happen," she says.

Quest's policy of 80 percent mastery also creates an expectation of rigor that can prove controversial in practice. Mathematics teachers at Quest differ, Hawkins notes, on whether homework scores can be averaged to meet the 80 percent requirement, whether low homework scores should count in the face of 80 percent test scores, and other such issues. In Exploratory Foundation subjects, teachers have gone to great lengths to cross-grade work from other teachers' students to increase reliability about a student's mastery, yet some maintain that knowing a student's past performance plays a necessary and important part in assessing his or her new work.

What's Next?

As Quest enters its fifth full year, many onlookers attribute its successes to its unusually small size—barely 170 students in four high school grades. The size of its graduating classes is increasing but still small: from 27 in 1999 to roughly 50 in 2000 and 60 in 2001. And many other districts could take even the original Quest design, which posited a student body of 400—small by U.S. norms—as a model either for self-contained high schools or for "houses" within large buildings.

What do Quest's founders and current leaders propose for their school's growth in coming years? Do they foresee expanding the school? Or will the district implant Quest-like mini-schools within or outside Humble's larger comprehensive high schools?

Part of the decision to keep Quest small, they point out, results from early funding decisions on the part of the district and from the space allocations that followed. The funding question remains critical to the school's future, as Quest's handsome Annenberg Challenge funding expires. Will the district pick up the slack, perhaps by pushing to increase enrollment?

Space is another issue. When the alternative, self-paced high-school-equivalency program known as PACE took its place in the same building Quest occupied, it took over one of the "pods" originally intended for a Quest house. If students were "beating down the doors" to enroll at Quest, virtually everyone involved acknowledges, PACE would have to make its home elsewhere.

Yet another factor derives from the problems Quest has experienced conveying its quite different educational philosophy to fellow educators and prospective students in its district. "We could have done a better job at the very beginning of marketing the school," comments assistant superintendent John Miller, "especially to key people like counselors, registrars, assistant principals. When you design a school like this, if you're not careful, the message can be, 'You're not successful with these kids, so we'll take them and be successful'"

To Miller, Quest exists partly as a laboratory for best practices. "I would like to see some of the best practices that we have utilized here [adopted] in the two comprehensive high schools," he says. "Community service is especially needed in affluent communities, where kids sometimes are not placed in situations where they have to give. Also, we teach very much in isolation in our traditional programming and anybody with any snap knows that there's connection."

Yet, Miller declares, "I think you can have large comprehensive high schools that meet the needs of kids, and that you can teach courses in isolation. I have moved away from the idea of trying to integrate curriculums. When you try to change the culture and the structure without starting fresh, it is extremely difficult." He does see ways, he says, for "individual teachers to use themes or generalizations so that kids see the connections," and hopes to start "planting some seeds [for that] in our district—in essence, taking Quest to the students."

Pragmatically, however, Miller sees Quest as a learning environment "to address students who need something different"—clearly, to him, not the majority in Humble. "If it would fill student needs to have a larger Quest high school or two or three or four Quest high schools, then we need to have those. We have a bond initiative

coming up in two more years, and I plan to ask whether we are interested in moving some programming, whether it's Quest or the discipline program or whatever. What's practical?"

Principal Cecilia Hawkins, who has long experience working with district educators in other capacities, has mapped out a strategy to identify the Humble students she sees as possible Quest students:

> *We're trying to match student needs with learning environments. We're going to do that by working not just with counselors at middle schools but [also] by creating the bridges between Quest and other areas—between administrators and teachers and others, so they can understand that this learning environment exists, and how they can support their personnel in getting students here. Teachers in particular, because they're the ones that really know the students—but also science coordinators, discipline-specific people in the district, so they know this is a learning opportunity that should be talked about and shared with as many people as they see.*

At the same time, she is eager to show that Quest's design could benefit a larger group:

> *If 100 more kids decided to come to Quest, I would absolutely support that. Then we could have a true understanding of what it would be like with more students, and if it's doable. Clearly I think we would have to refine some of our structures a little more.*

When comparing the statements by administrators with a close look at the Quest student body and how it describes its experience, however, a tension emerges concerning the fundamental purposes of this unusual district school. On the one hand, administrators define Quest as an alternative, not the norm—as a place for students who need something that the district's larger high schools do not provide. That "something" is not special education instruction, nor a disciplinary setting; in fact, special facilities exist elsewhere for that in Humble. So, who are these students who—unlike the majority, in these administrators' view—need interdisciplinary instruction, a smaller and more personal learning environment, and more freedom to work at their own pace toward explicit school-wide standards? Does one identify them solely by their lack of success or their discontent with the Humble norms for high school? Or, might one think of them instead as turning toward something positive, as exchanging one culture for another more conducive to their flourishing? What is that positive thing that Quest represents, and who is it really for?

The students in the halls and classrooms of Quest High School—and the work they produce—look not like academic or social misfits but like thoughtful, engaged, articulate models of active learning. Until administrators come to terms with the world of difference between the dominant district high school culture and that of this small progressive school, perhaps only this student's words get the Quest experience right: "You get to drop everything and just learn."

Appendix A

Protocol for Designing Rubrics for Instructional Objectives

1. There are two levels for designing rubrics: Advanced Mastery and Mastery. Mastery is defined to be the fulfillment of requirements for an objective at a score level of 3 or better.

2. When developing rubrics, use the following template structure:

   (Exit Outcome, Proficiency, Objective Number). For example, LB1b1 indicates the first objective (1) in the second proficiency (b) in the first exit outcome in the Learner Behavior Standard Set (LB1).

   Write out the objective.

3. Write the ADVANCED MASTERY level first. Include only the 3 and 4 scores since scores below a 3 are not acceptable for advanced mastery.

4. Write the MASTERY level. Include score descriptors which range from 1 (lowest) to 4 (highest).

5. All rubrics are written as **declarative statements**. The audience for the rubric is the student, assessor, parent, or any outside individual.

6. The rubric must be easily **understood, measurable, and observable**. Any one must be able to use the rubric to assess the objective regardless of their area of expertise. Any expectation not specified in the rubric will not be used for assessment purposes.

7. Define the **essential component(s)** of the skill, knowledge, or performance criteria which is being assessed. Refer to appropriate curriculum resources to identify and select the most essential components.

8. Use **verbs** in the rubric statement which are consistent with the language and level of the instructional objective. For example, if the objective is written at the analysis level, write the rubric at the same level or higher. (Refer to Bloom's Taxonomy of Learning for guidelines.)

9. Write the rubric as free as possible of subjective and indefinite words such as "some," "few," "with some error," "with significant errors," etc.

10. Once the rubric has been written, have an outside staff member read the rubric for clarity and consistency.

11. Be sensitive to the inclination to write rubrics as activities. Remember, a rubric may be aligned to a variety of content bases and assessment processes and must be generic enough to be applied by any educator.

Appendix B

Quest High School • Report Card

(Student Name)	*(Family Facilitator)*	*(Date reported)*

Dear Parent(s):

In an effort to keep you informed concerning your child's progress at Quest, the following is a **2000–2001** report card that includes the _____ six weeks of work.

As you may know, we do not track a student's progress in a traditional sense through numbers and percentages. Rather, students complete learning objectives (see your student handbook for details) by mastering them through activities in the exploratory. Students are expected to master all objectives in order to graduate. Objectives not mastered are considered deficient and must be completed ***as soon as possible*** **according to our Academic Completion Policy to ensure the student's expected graduation date.**

The following is a summary of the Quest requirements for this six weeks:

Also, be aware that I send a progress report home **each Friday**. Items scored 10 indicate a completed assignment, items marked 5 indicate an assignment turned in but still being revised, and items with no mark are either not attempted or have not yet been assigned. **Please sign and return the progress report each time**. If you have any questions or concerns, please call 281-812-3447 so we may discuss them.

White Copy: Parent *Yellow Copy:* Facilitator *Pink Copy:* Permanent Record

QUEST HIGH SCHOOL

Community Partnership Final Evaluation

COMMUNITY MEMBER _____

QUEST STUDENT _____

SERVICE _____

Please list the specific activities in which the student has been involved and the skills that were practiced/learned:

_____

_____

_____

_____

_____

_____

_____

In order to better our community partnership program, we would appreciate you taking a few minutes to evaluate our students. Using the letter code, please rate our student as follows:

E—Excellent VG—Very Good S—Satisfactory NI—Needs Improvement

Attendance/Punctuality:

Is consistent in attendance _____

Reports to community site on time _____

Attitude:

Accepts responsibility _____

Is enthusiastic and interested _____

Displays appropriate appearance & dress _____

Is courteous & cooperative _____

Displays emotional maturity _____

Exercises good judgment _____

Is sincere _____

Relates well to a variety of people _____

Is committed and caring _____

Interacts appropriately _____

Community Partnership Final Evaluation *continued*

E—Excellent VG—Very Good S—Satisfactory NI—Needs Improvement

Learning Process:

Shows initiative _____

Assumes responsibility for own learning _____

Asks appropriate questions _____

Shows problem solving skills _____

Performance:

Begins work promptly _____

Appreciates suggestions _____

Completes assigned tasks _____

Exhibits competence _____

Progressively requires less supervision _____

Is a dependable worker _____

Follows directions _____

Overall Impression of Student:

To quote an old African proverb:

"It takes a village to raise a child"

Thank you for being our partner and our link to the community.

Quest High School Staff

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